UNIVERSITY OF CALIFORNIA SCRIPPS INSTITUTION OF OCEANOGRAPHY

data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6304
9 April - 24 May 1963

CCOFI Cruise 6306
25 - 26 June 1963

and

USCG Station November
12 May - 2 June 1963

SIO Reference 64-13
2 March 1964

UNIVERSITY OF CALIFORNIA

SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 6304
9 April - 24 May 1963

and

CCOFI Cruise 6306
25 - 26 June 1963

Sponsored by

Marine Research Committee

SIO Reference 64-13
2 March 1964

Approved for distribution:

Roger Revelle, Director

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FIGURES
Cruise 6304

INTRODUCTION

The data presented in this report were collected by the RV Black Douglas of the Bureau of Commercial Fisheries and the RV Alexander Agassiz of the Scripps Institution of Oceanography on Cruise 6304 and by the RV Alexander Agassiz on Cruise 6306 of the California Cooperative Oceanic Fisheries Investigations program. Also included in this report are the data collected at Station November for the May-June 1963 cruise of the USCGC Minnetonka of the United States Coast Guard. The first two figures in this cruise numbering system represent the year of the cruise; the last two figures, the month. The cruises preceding this one in the series are 6210-11 and 6212 (SIO Ref. 63-25) and 6301-2 (SIO Ref. 64-2).

The data are tabulated at observed depths; the interpolated and computed values are tabulated at standard depths and are accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication; however, the data contained in this report have been carefully edited and no modifications should be necessary before final publication.

STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.[1/] The 125-meter level was introduced into the integration to obtain greater accuracy in the determination of ΔD.

To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer, thermograph, or bathythermograph, while temperatures from reversing thermometers are recorded in hundredths of a degree. The salinity values obtained by salinometer are recorded to three decimal places, provided they meet accepted standards. The values recorded "have a reproducibility of ±0.004‰ salinity at the 95 per cent probability level, and a probable accuracy of ±0.01‰ salinity or better at the same level of probability."[2/] The values are recorded to two decimal places when obtained by chlorinity titration, or by salinometer where only one determination per sample was obtained, or where there is doubt concerning the accuracy of a particular sample, or of all samples on

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[1/] Klein, Hans T. A new technique for processing physical oceanographic data. MS.

[2/] Quotation from Department of Oceanography, University of Washington, Tech. Rep. No. 66, UW Ref. 60-18, October 1960.

a station. The accuracy of all samples obtained by salinometer and recorded to two decimal places is believed to be equal to or better than those obtained by manual titration.

Extrapolated values and values interpolated between remote observations are entered within parentheses. A hyphen is used to indicate a missing observed value. The time is the time of messenger release. When more than one cast was made on a station, messenger times and wire angles are given in the order of increasing depth. A line is left blank between the observed data of each cast.

On stations where more than one cast is lowered, the various property curves may not agree perfectly. This discrepancy may be caused by changes in geographical position, real property changes with time, slight error in measurement, or a combination of these factors. Stations with overlapping casts have the following footnote: Overlapping casts; reconciliation of property curves when necessary.

FOOTNOTES

Laboratory personnel note any possible imperfections in the sealing of the bottles as follows:

Loose bottle cap:	The cap is definitely loose so that it could be moved with very little applied pressure. The salinity values obtained from these samples may be usable depending on time and/or conditions of storage.
Possible evaporation:	Either the cap was sealed with less than usual pressure, the bottle edge chipped, the rubber washer cracked, or the bale broke on opening, etc.

Use of the above values in interpolation depends upon consistency with other values of salinity and other properties, and these footnotes are supplemented with "falls on property curve" or "does not fall on property curve," depending upon whether the property curve was drawn through the value or not.

In addition to footnotes, two special notations are used without footnotes because their meaning is always the same.

To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

p: pretrip or posttrip.

Values which are not drawn through because they seem to be in error without apparent reason are indicated by the following notation.

u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).

FORMAT

These data are typed in the format of the University of California Press publication, Oceanic Observations of the Pacific.

PERSONNEL
Cruise 6304

SHIPS' CAPTAINS

Forster, Charles W., RV Black Douglas
Miller, Frank, RV Alexander Agassiz

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

RV Alexander Agassiz

*Anderson, Norman E., Principal Marine Technician
Brennen, Robert E., Senior Marine Technician
Crowe, Fred J., Laboratory Assistant
Ernst, Richard K., Marine Technician
Hodnett, Haley L., Senior Marine Technician
Muus, David A., Marine Technician
*Netzley, Ronald L., Marine Technician
Peters, Forrest D., Marine Technician
Pine, James S., Senior Marine Technician
*Rosendahl, Donald V., Electronics Technician
Wagner, Vaughn M., Fishery Aid

RV Black Douglas

Lawson, Jan B., Senior Marine Technician
Kimura, M., Fishery Research Biologist
Netzley, Ronald L., Marine Technician
Paloma, ~~Peter~~ Pedro A., Fishery Aid

USCGC Minnetonka (May-June 1963 cruise)

Bottom, Kenneth S., Senior Marine Technician

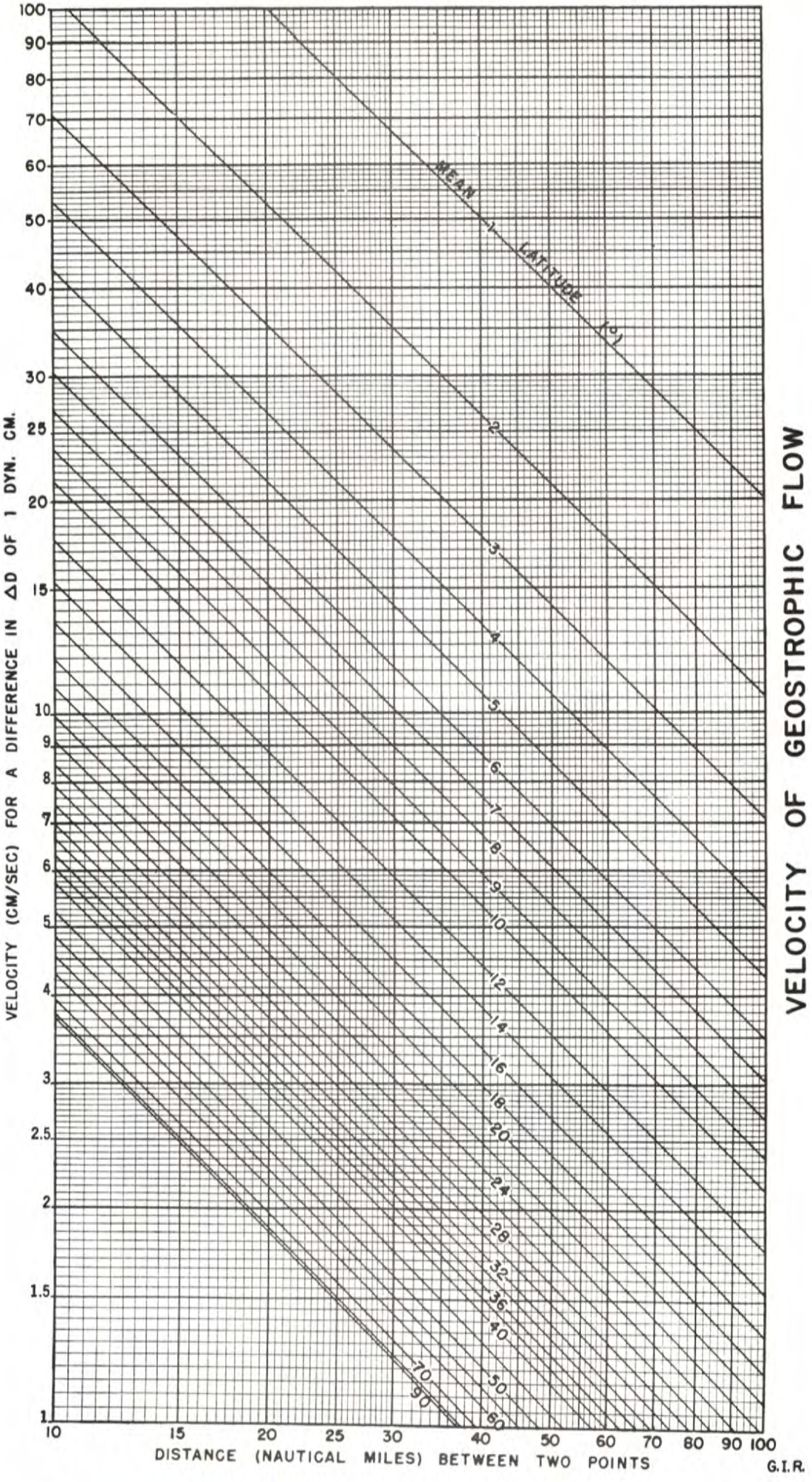
*Participated in part of cruise only.

INSERT FOR CCOFI CRUISE 6304 (SIO Ref. 64-13)

The CCOFI cruise-numbering and station-numbering system has been slightly revised in order to make it more consistent with the system used by the National Oceanographic Data Center.

Cruise numbers. Hyphenated numbers indicating quarterly cruises (extending over a period of more than one month) will no longer be used. A four-digit number will appear instead, where the first two digits represent the year, and the last two digits the month in which the first data were collected.

Station numbers. Superscript numbers will not be used any longer, either for indication of the station line (before the decimal point) nor the station position along that line (after the decimal point). (Each station number represents, really, an area of about twelve by four nautical miles.) The exact position will be expressed by latitude and longitude.


VELOCITY OF GEOSTROPHIC FLOW
VELOCITY (CM/SEC) FOR A DIFFERENCE IN ΔD OF 1 DYN. CM.
DISTANCE (NAUTICAL MILES) BETWEEN TWO POINTS
MEAN LATITUDE (°)
100
90
80
70
60
50
40
30
25
20
15
10
9
8
7
6
5
4
3
2.5
2
1.5
1
10
15
20
25
30
40
50
60
70
80
90
100
1
2
3
4
5
6
7
8
9
10
12
14
16
18
20
24
28
32
36
40
70
90
50
60
G.I.R.

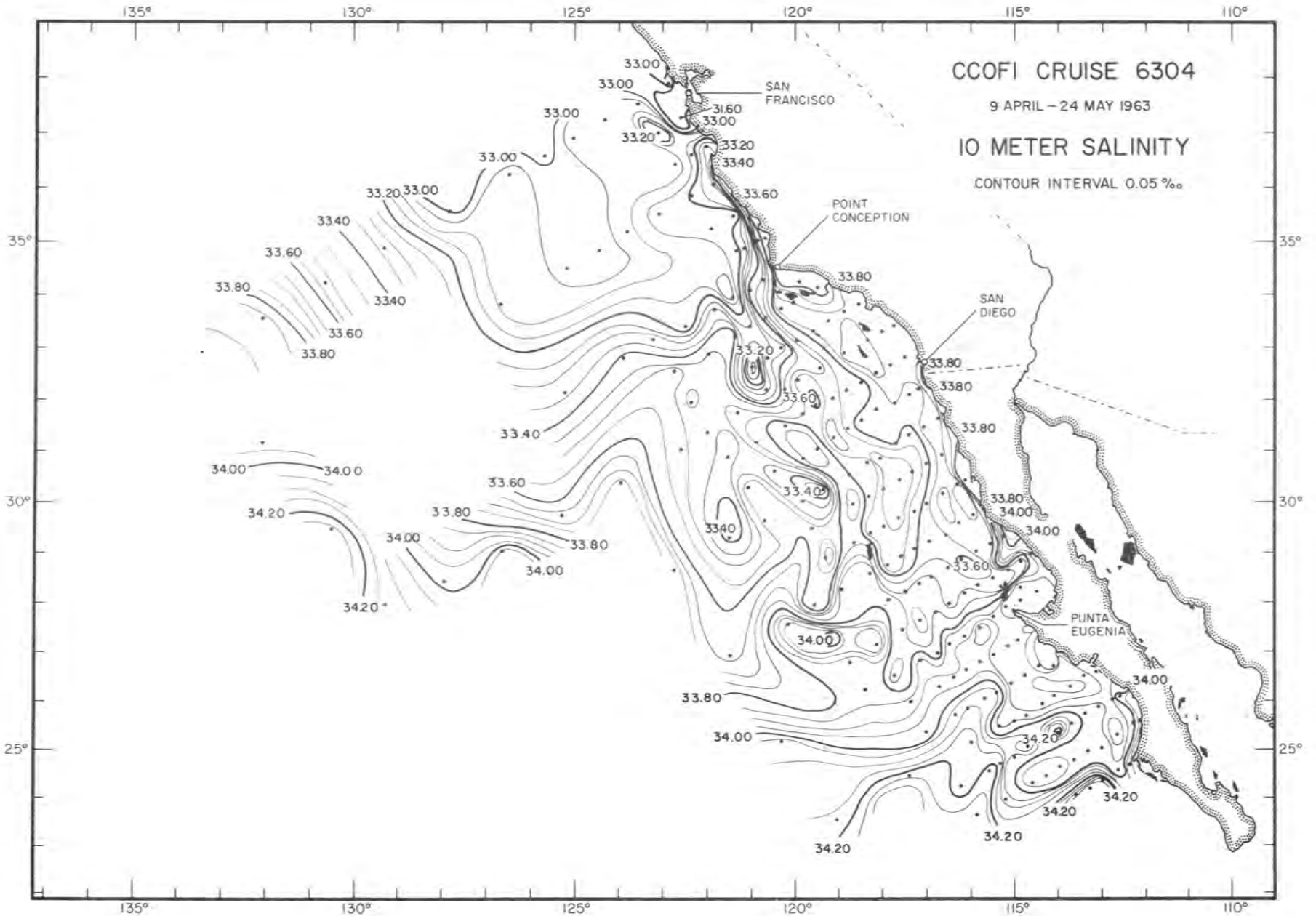

CCOFI CRUISE 6304
9 APRIL – 24 MAY 1963
10 METER SALINITY
CONTOUR INTERVAL 0.05 ‰
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 5

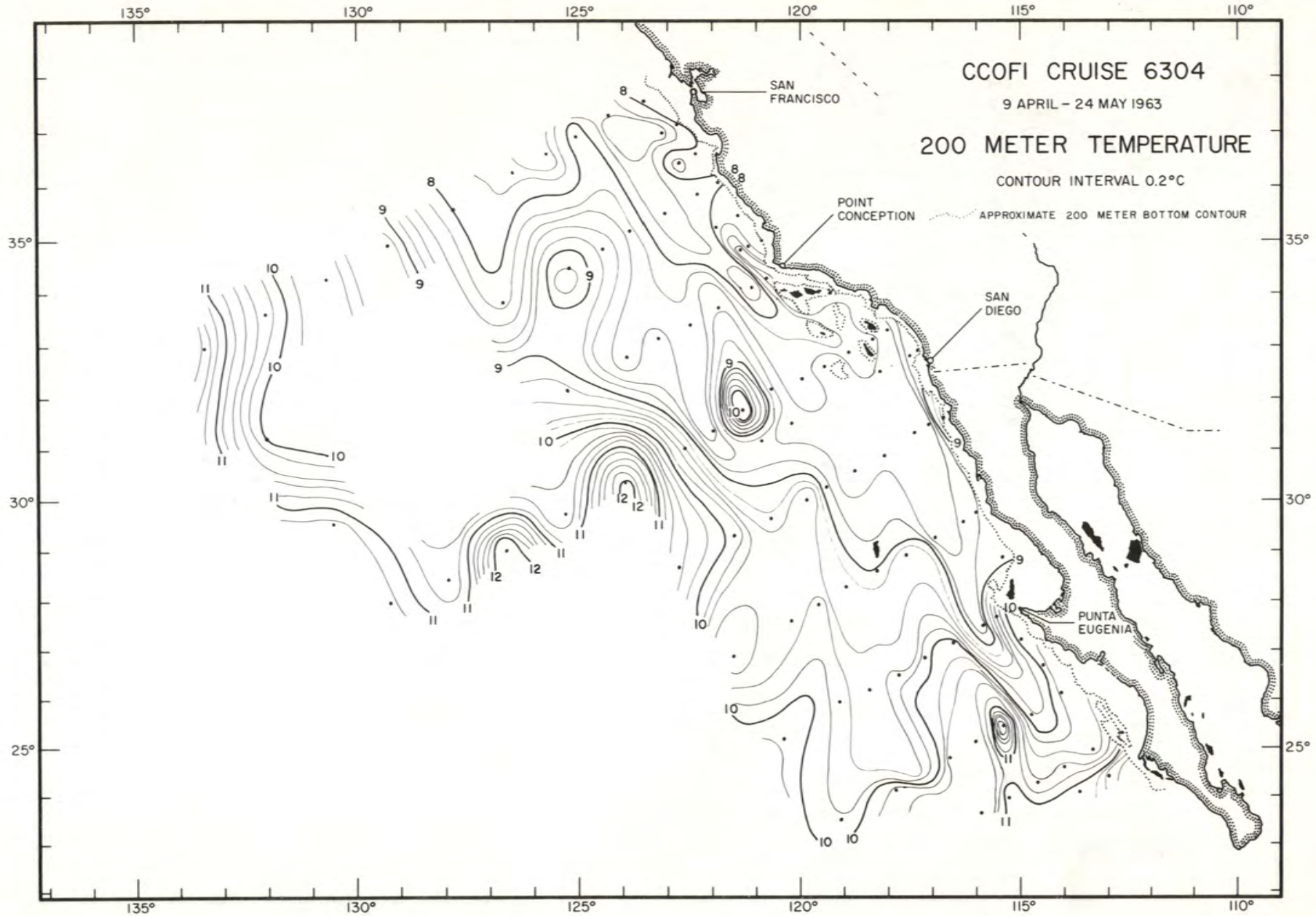

CCOFI CRUISE 6304
9 APRIL – 24 MAY 1963
200 METER TEMPERATURE
CONTOUR INTERVAL 0.2°C
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 6

5 March 2003
Loaned
6304 dyn. ht.
figure to
Ed Brinton
fig 142

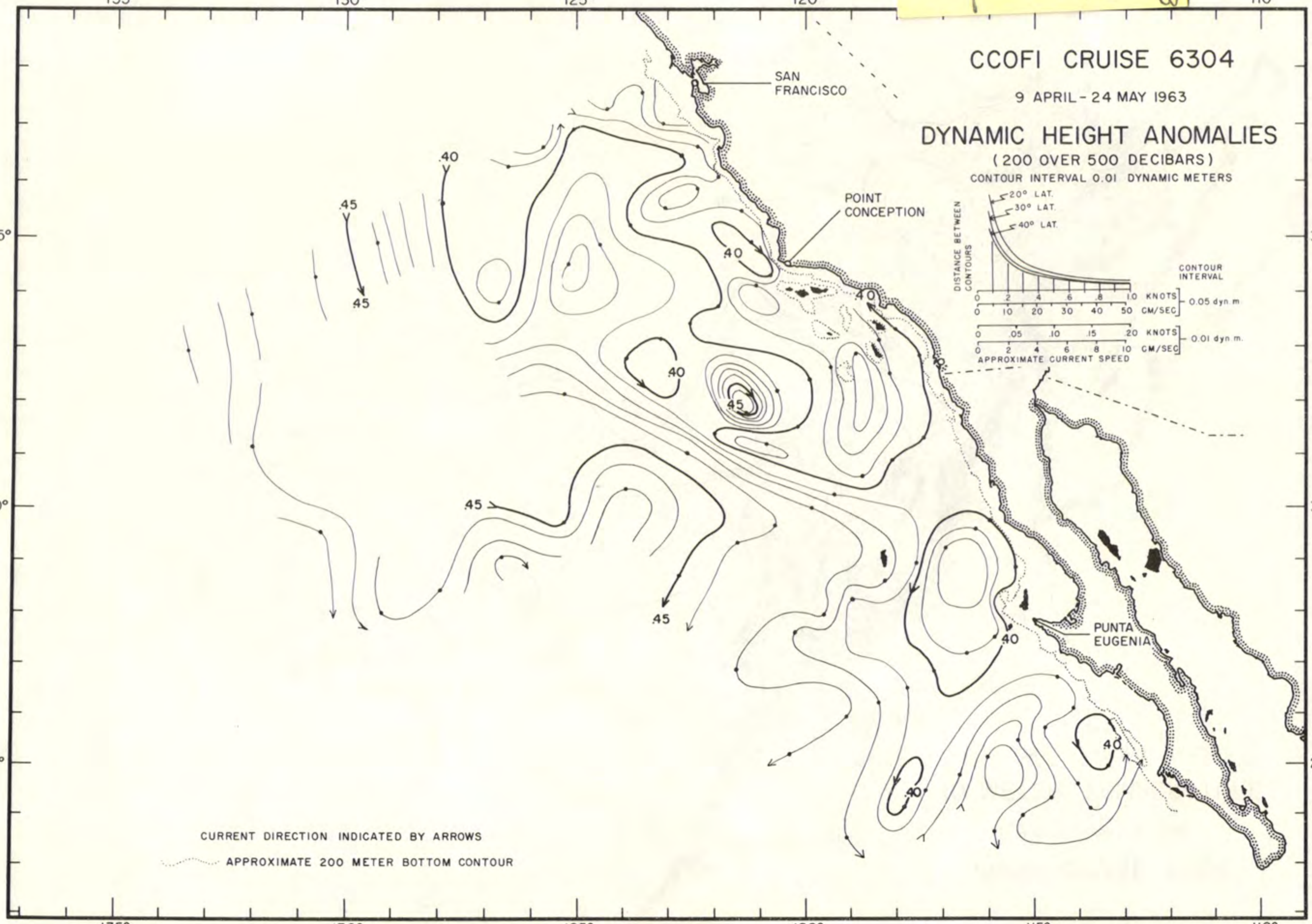


FIGURE 3

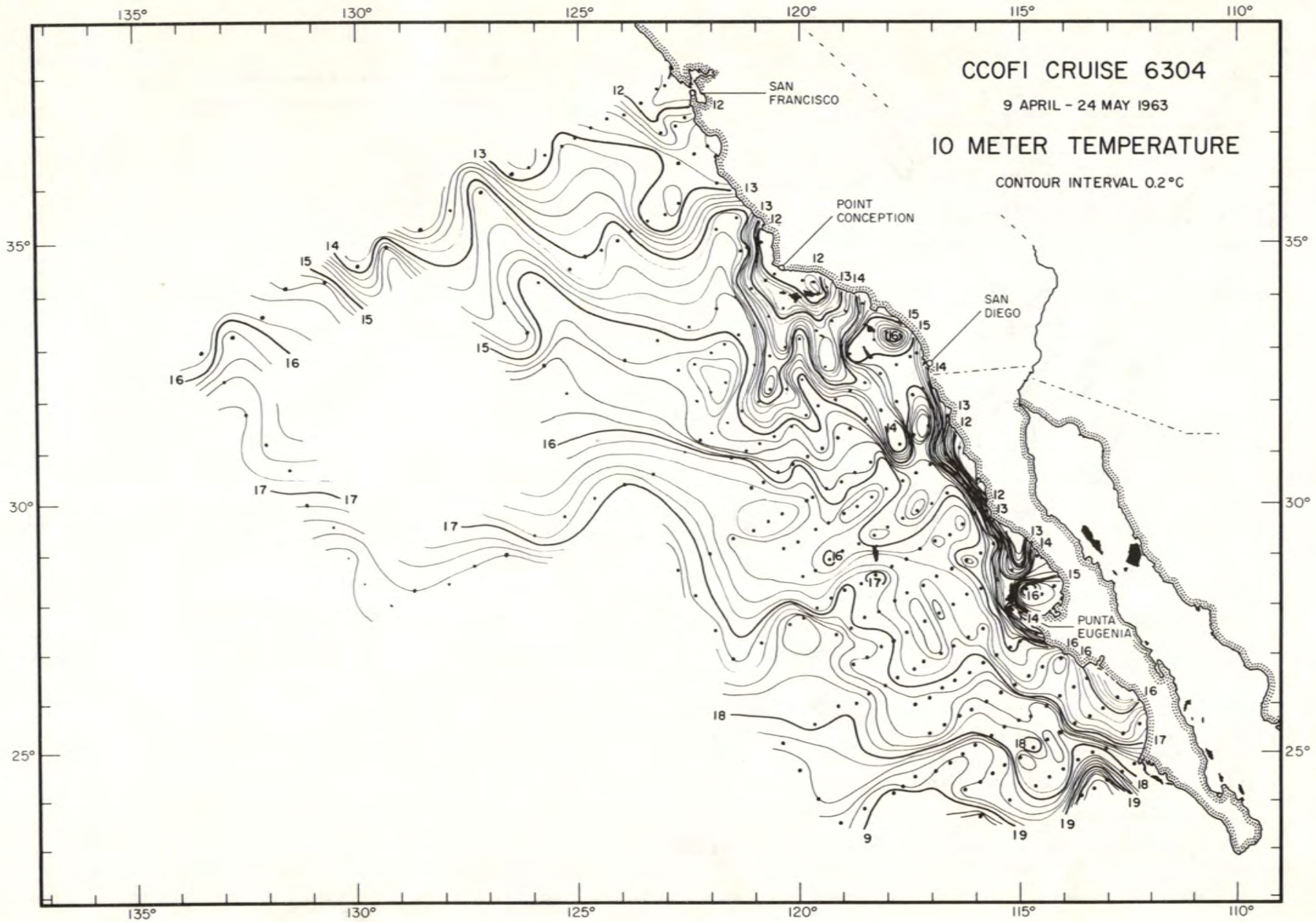

CCOFI CRUISE 6304
9 APRIL - 24 MAY 1963
10 METER TEMPERATURE
CONTOUR INTERVAL 0.2°C
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°

FIGURE 4

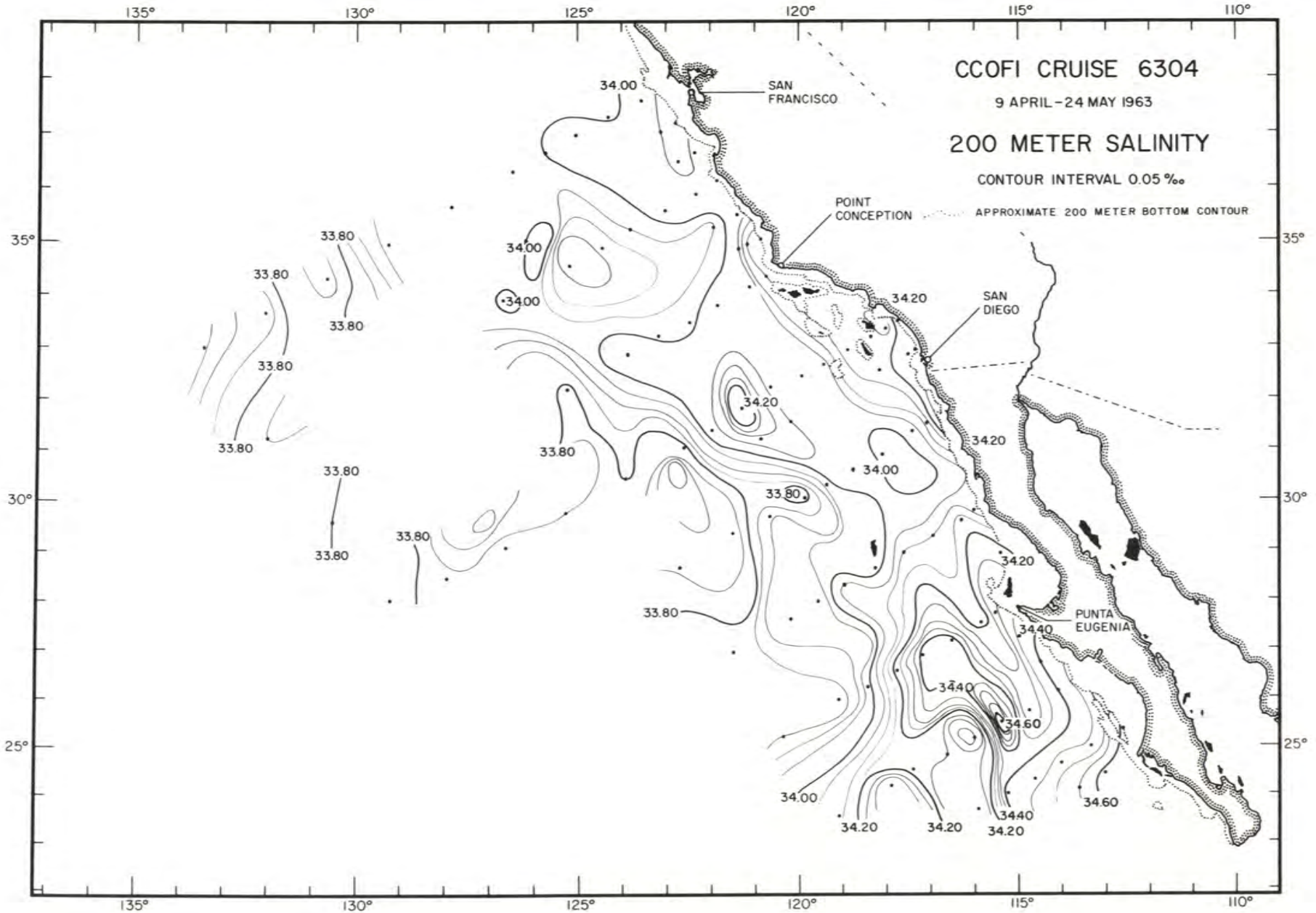

CCOFI CRUISE 6304
9 APRIL-24 MAY 1963
200 METER SALINITY
CONTOUR INTERVAL 0.05 ‰
APPROXIMATE 200 METER BOTTOM CONTOUR
SAN FRANCISCO
POINT CONCEPTION
SAN DIEGO
PUNTA EUGENIA
135°
130°
125°
120°
115°
110°
35°
30°
25°
34.00
33.80
34.20
34.40
34.60

FIGURE 7

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; April 23, 1963; 0250 GCT; 37°53.5'N, 123°02'W; sounding, 40 fm; wind, 320°, force 5; weather, clear; sea, moderate; wire angle, 08°.													60.52
2	11.80	32.850	6.53	0.66	12	299	0	(11.80)	(32.85)	(6.53)	(24.98)	(299)	(0.00)
12	11.65	32.867	6.50	0.61	12	295	10	11.70	32.86	6.51	25.01	296	0.03
22	11.1	33.027	5.90	0.52	11	273	20	11.3	32.96	6.16	25.16	282	0.06
32	9.97	33.487	4.48	0.83	22	221	30	10.2	33.40	4.77	25.69	231	0.08
42	9.32	33.716	3.51	0.66	34	194	50	9.01	33.81	3.13	26.21	182	0.13
52	8.96	33.843	3.02	-	-	179							
ALEXANDER AGASSIZ; April 23, 1963; 1225, 0840 GCT; 37°36.5'N, 123°36'W; sounding, 1800+ fm; wind, 340°, force 6; weather, clear; sea, very rough; wire angle, 38°, 37°.													60.60
2	11.80	33.100	6.19	0.29	6	280	0	(11.80)	(33.10)	(6.19)	(25.17)	(280)	(0.00)
10	11.82	33.091	6.24	0.25	7	281	10	11.82	33.09	6.24	25.16	281	0.03
29	11.8	33.096	6.23	0.40	5	281	20	11.8	33.09	6.23	25.17	281	0.06
53	10.72	33.109	6.13	0.29	5	261	30	11.8	33.10	6.23	25.17	280	0.08
61	10.45	33.309	5.14	0.50	11	242	50	11.0	33.11	6.17	25.33	266	0.14
76	9.94	33.485	4.48	-	-	221	75	9.96	33.47	4.52	25.79	222	0.20
88	9.70	33.624	3.97	-	-	206	100	9.44	33.73	3.47	26.07	195	0.25
99	9.45	33.723	3.48	-	-	195	125	9.00	33.88	2.93	26.26	177	0.30
121	9.07	33.855	2.99	-	-	180	150	8.79	33.94	2.72	26.34	169	0.34
135	8.88	33.907	2.85	-	-	173	200	8.05	34.04	2.35	26.53	151	0.43
155	8.76	33.949	2.68	-	-	168	250	7.45	34.07	1.96	26.64	140	0.50
177	8.48	34.019	2.42	-	-	159	300	6.93	34.10	1.62	26.74	131	0.57
198	8.08	34.038	2.37	-	-	151	400	6.40	34.21	0.79	26.90	116	0.70
232	7.70	34.063	2.04	-	-	144	500	5.76	34.27	0.57	27.03	104	0.81
279	7.08	34.083	1.82	-	-	134	600	5.06	34.31	0.45	27.14	93	0.92
355	6.67	34.152	1.09	-	-	124	700	4.64	34.36	0.45	27.23	85	1.02
430	6.32	34.222	0.65	-	-	114	800	4.37	34.40	0.50	27.29	79	1.11
498	5.80	34.251	0.55	-	-	106	1000	3.75	34.46	0.67	27.40	68	1.27
							1200	3.26	34.50	0.85	27.48	61	1.42
421a)	6.18	34.230	0.75	-	-	112	1500	2.71	34.56	1.19	27.58	52	1.61
508	5.68	34.278	0.63	-	-	103	2000	2.02	34.63	2.06	27.70	41	1.89
641	4.86	34.329	0.43	-	-	89	2500	1.76	34.66	2.40	27.74	37	2.12
820	4.31	34.407	0.51	-	-	78	3000	1.61	34.68	2.80	27.77	34	2.35
999	3.76	34.463	0.67	-	-	68							
1225	3.20	34.512	0.89	-	-	59							
1451	2.78	34.548	1.15	-	-	53							
1682	2.42	34.593	1.47	-	-	47							
1914	2.12	34.62	2.04	-	-	42							
2147	1.92	34.634	2.06	-	-	40							
2382	1.80	34.663	2.32	-	-	37							
2620	1.72	34.662	2.62	-	-	36							
2861	1.64	34.682	2.81	-	-	34							
3103	1.60	34.675	2.80	-	-	34							
ALEXANDER AGASSIZ; April 23, 1963; 1735 GCT; 37°17'N, 124°21'W; sounding, 2100 fm; wind, 340°, force 6; weather, partly cloudy; sea, very rough; wire angle, 43°.													60.70
2	12.79	33.055	6.44	0.22	4	301	0	(12.79)	(33.06)	(6.44)	(24.95)	(301)	(0.00)
10	12.79	33.058	6.39	0.21	3	301	10	12.79	33.06	6.39	24.95	301	0.03
28	12.8	33.059	6.42	0.20	3	301	20	12.8	33.06	6.40	24.95	301	0.06
35	12.75	33.060	6.22	0.29	4	300	30	12.8	33.06	6.30	24.95	301	0.09
47	11.78	33.254	5.84	-	-	269	50	11.48	33.28	5.67	25.37	261	0.15
59	10.64	33.342	5.17	-	-	242	75	9.54	33.48	4.55	25.86	215	0.21
77	9.46	33.503	4.48	-	-	212	100	8.92	33.69	4.12	26.13	190	0.26
93	9.10	33.638	4.17	-	-	196	125	8.63	33.84	3.87	26.29	174	0.30
109	8.78	33.750	4.06	-	-	183	150	8.38	33.95	3.51	26.41	162	0.35
133	8.56	33.884	3.74	-	-	170	200	7.61	33.99	3.12	26.56	148	0.43
156	8.31	33.961	3.45	-	-	160	250	7.44	34.09	2.09	26.66	139	0.50
187	7.84	33.989	3.15	-	-	152	300	6.95	34.13	1.62	26.76	129	0.57
212	7.48	33.997	3.09	-	-	146	400	6.24	34.21	0.97	26.92	114	0.69
251	7.44	34.095	2.08	-	-	138	500	5.64	34.27	0.65	27.04	103	0.81
304	6.91	34.131	1.58	-	-	129							
388	6.32	34.202	1.01	-	-	116							
467	5.85	34.249	0.73	-	-	107							
535	5.41	34.286	0.59	-	-	99							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO
CCOFI
6304

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
60.80	ALEXANDER AGASSIZ; April 23, 1963; 2312 GCT; 36°58.5'N, 125°05'W; sounding, 2300 fm; wind, 340°, force 3; weather, partly cloudy; sea, very rough; wire angle, 30°.												
2	13.02	33.074	6.31	0.41	3	304	0	(13.02)	(33.07)	(6.31)	(24.92)	(305)	(0.00)
10	13.02	33.071	6.30	0.40	3	305	10	13.02	33.07	6.30	24.92	305	0.03
32	12.9	33.125	6.27	0.40	3	298	20	13.0	33.09	6.30	24.94	303	0.06
57	11.31	33.196	5.82	0.70	5	265	30	12.9	33.12	6.28	24.98	299	0.09
65	10.56	33.379	4.88	0.75	10	238	50	11.9	33.16	6.08	25.20	278	0.15
82	9.84	33.514	4.34	-	-	217	75	10.09	33.46	4.55	25.76	225	0.21
94	9.64	33.612	4.01	-	-	206	100	9.42	33.65	3.89	26.02	200	0.27
106	9.09	33.708	3.68	-	-	191	125	8.97	33.81	3.39	26.21	181	0.31
132	8.93	33.845	3.27	-	-	178	150	8.69	33.94	2.79	26.36	168	0.36
148	8.70	33.934	2.80	-	-	168	200	8.19	34.02	2.62	26.50	154	0.44
172	8.52	33.975	2.67	-	-	162	250	7.65	34.06	2.23	26.61	144	0.52
201	8.18	34.017	2.61	-	-	154	300	7.09	34.08	1.82	26.70	135	0.59
227	7.92	34.028	2.50	-	-	150	400	6.23	34.14	1.16	26.87	119	0.72
267	7.54	34.073	2.09	-	-	141	500	5.50	34.22	0.68	27.02	105	0.84
322	6.88	34.088	1.70	-	-	131							
407	6.18	34.148	1.10	-	-	118							
486	5.59	34.206	0.74	-	-	107							
552	5.26	34.273	0.47	-	-	98							
60.90	ALEXANDER AGASSIZ; April 24, 1963; 0907, 0517 GCT; 36°37'N, 125°47'W; sounding, 2412 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 25°, 24°.												
2	12.84	32.979	6.35	0.42	3	308	0	(12.84)	(32.98)	(6.35)	(24.88)	(308)	(0.00)
11	12.88	32.978	6.27	0.41	3	309	10	12.88	32.98	6.28	24.87	309	0.03
33	12.9	33.00 a)	6.27	0.42	3	308	20	12.9	32.99	6.27	24.88	308	0.06
42	11.81	33.169	-	0.65	5	275	30	12.9	33.00	6.27	24.89	308	0.09
56	9.92	33.172	5.44	0.53	10	243	50	10.80	33.18	5.72	25.42	257	0.15
70	9.87	33.450	4.45	-	-	222	75	9.93	33.55	4.22	25.85	216	0.21
92	9.28	33.66 b)	3.82	-	-	197	100	9.06	33.72	3.70	26.13	189	0.26
110	8.79	33.758	3.55	-	-	183	125	8.53	33.84	3.23	26.30	173	0.31
129	8.46	33.865	3.18	-	-	170	150	8.12	33.94	2.96	26.45	159	0.35
158	7.99	33.961	2.87	-	-	156	200	7.47	34.00	2.53	26.59	146	0.43
184	7.66	34.001	2.63	-	-	148	250	6.88	34.02	2.23	26.69	137	0.50
222	7.18	34.002	2.49	-	-	142	300	6.47	34.05	1.90	26.76	129	0.57
250	6.88	34.020	2.23	-	-	137	400	5.63	34.11	1.15	26.92	115	0.69
297	6.50	34.044	1.93	-	-	130	500	5.09	34.19	0.67	27.04	102	0.81
357	5.92	34.066	1.46	-	-	121	600	4.73	34.27	0.46	27.15	93	0.91
452	5.35	34.140	0.86	-	-	109	700	4.40	34.35	0.39	27.25	83	1.00
539	4.95	34.219	0.56	-	-	99	800	4.09	34.40	0.39	27.32	76	1.09
611	4.70	34.276	0.44	-	-	92	1000	3.59	34.47	0.49	27.43	66	1.25
							1200	3.12	34.51	0.69	27.51	59	1.39
450c)	5.35	34.155	0.97	-	-	108	1500	2.58	34.56	1.09	27.59	50	1.58
544	4.85	34.140u	0.89	-	-		2000	1.98	34.62	1.73	27.69	41	1.85
773	4.17	34.389	0.38	-	-	78	2500	1.71	34.65	2.20	27.74	37	2.09
1005	3.57	34.470	0.50	-	-	66	3000	1.60	34.66	2.56	27.75	35	2.32
1237	3.04	34.519	0.74	-	-	57	4000	1.50	34.69	3.20	27.78	32	2.77
1470	2.64	34.558	1.03	-	-	51							
1706	2.28d)	34.585	1.33	-	-	46							
2182	1.86	34.633	1.91	-	-	39							
2417	1.76	34.651	2.16	-	-	37							
2656	1.66	34.659	2.36	-	-	36							
2894	1.62	34.663	2.49	-	-	35							
3134	1.58	34.669	2.64	-	-	35							
3373	1.54	34.678	2.86	-	-	34							
3613	1.50	34.684	3.01	-	-	33							
3855	1.50	34.688	3.13	-	-	33							
4096	1.50	34.693	3.23	-	-	32							
4339	1.53	34.691	3.30	-	-	33							

a) Mean value of 32.97 and 33.04‰.
b) Mean value of 33.65 and 33.68‰.
c) Overlapping casts; reconciliation of property curves when necessary.
d) Mean value of 2.25 and 2.32°C.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

60.100

ALEXANDER AGASSIZ; April 24, 1963; 1713, 1425 GCT; 36°17'N, 126°30'W; sounding, 2529 fm; wind, 300°, force 4; weather, cloudy; sea, moderate; wire angle, 12°, 25°.

2	12.84	33.056	6.55	0.21	3	302	0	(12.84)	(33.06)	(6.55)	(24.94)	(302)	(0.00)
12	12.84	33.085	6.53	0.12	3	300	10	12.84	33.08	6.54	24.96	301	0.03
36	12.7	33.063	6.51	0.15	4	299	20	12.8	33.09	6.53	24.97	299	0.06
65	11.45	33.096	6.23	-	-	274	30	12.7	33.08	6.52	24.99	298	0.09
75	10.80	33.302	5.73	-	-	248	50	12.7	33.06	6.51	24.97	299	0.15
94	9.03	33.287	5.23	-	-	221	75	10.80	33.30	5.73	25.51	248	0.22
109	9.06	33.583	4.40	-	-	200	100	9.24	33.37	5.13	25.83	218	0.28
124	8.76	33.714	3.87	-	-	185	125	8.74	33.72	3.83	26.18	185	0.33
154	8.42	33.874	3.22	-	-	169	150	8.48	33.86	3.25	26.33	170	0.37
174	8.08	33.921	3.32	-	-	160	200	7.78	33.97	3.11	26.52	152	0.46
202	7.75	33.975	3.09	-	-	152	250	7.31	34.03	2.65	26.63	141	0.53
236	7.40	34.006	2.87	-	-	144	300	6.73	34.06	2.12	26.74	132	0.60
266	7.18	34.051	2.38	-	-	138	400	5.75	34.09	1.46	26.89	117	0.73
315	6.54	34.058	2.00	-	-	129	500	5.17	34.19	0.78	27.04	103	0.85
378	5.93	34.075	1.62	-	-	121	600	4.90	34.29	0.61	27.15	93	0.95
476	5.19	34.152	1.12	-	-	106	700	4.58	34.36	0.47	27.24	84	1.05
565	5.00	34.260	0.67	-	-	96	800	4.26	34.40	0.38	27.30	78	1.13
638	4.78	34.322	0.53	-	-	89	1000	3.68	34.46	0.43	27.41	68	1.30
							1200	3.20	34.51	0.67	27.50	60	1.44
486a)	5.28	34.175	0.65	-	-	106	1500	2.64	34.55	0.93	27.58	52	1.63
719	4.53	-	-	-	-		2000	1.98	34.61	1.64	27.68	42	1.91
909	3.93	34.437	0.33	-	-	72	2500	1.76	34.65	2.02	27.73	37	2.15
1146	3.31	34.501	0.63	-	-	61	3000	1.59	34.67	2.46	27.76	35	2.38
1384	2.84	34.532	0.79	-	-	55	4000	1.50	34.69	3.20	27.78	32	2.83
1621	2.46	34.582	1.17	-	-	48							
1862	2.11	34.609	1.52	-	-	43							
2101	1.91b)	34.609	1.71	-	-	42							
2342	1.80	34.646	1.97	-	-	38							
2582	1.73	34.653	2.23	-	-	37							
2823	1.62	34.662	2.40	-	-	35							
3065	1.58	34.683	2.49	-	-	34							
3306	1.55	34.679	2.72	-	-	34							
3547	1.50	34.681	2.92	-	-	33							
3790	1.50	34.700u	3.09	-	-								
4031	1.50	34.689	3.23	-	-	33							
4273	1.52	34.691	3.28	-	-	33							
4516	1.55	34.672u	2.98u	-	-								

60.120

ALEXANDER AGASSIZ; April 24, 1963; 0203 GCT; 35°37'N, 127°54'W; sounding, 2500 fm; wind, 330°, force 5; weather, drizzle; sea, rough; wire angle, 27°.

2	13.54	32.995	6.21	0.40	3	320	0	(13.54)	(33.00)	(6.21)	(24.76)	(320)	(0.00)
10	13.54	32.996	6.22	0.38	2	320	10	13.54	33.00	6.22	24.76	320	0.03
33	13.5	32.987	6.26	0.39	2	320	20	13.5	32.99	6.24	24.76	320	0.06
60	12.88	32.952	6.16	0.41	4	311	30	13.5	32.99	6.25	24.76	320	0.10
69	11.68	32.950	6.01	0.56	4	289	50	13.5	32.98	6.25	24.75	320	0.16
86	10.52	33.123	5.47	-	-	257	75	11.28	33.00	5.86	25.19	279	0.24
99	9.64	33.256	5.07	-	-	233	100	9.60	33.27	5.01	25.69	231	0.30
112	9.22	33.468	4.50	-	-	211	125	9.17	33.57	4.25	25.99	202	0.35
136	9.11	33.683	4.03	-	-	193	150	8.82	33.80	3.87	26.23	180	0.40
154	8.72	33.839	3.81	-	-	176	200	8.00	33.98	3.08	26.49	155	0.49
179	8.36	33.952	3.37	-	-	162	250	7.34	34.01	2.70	26.61	143	0.56
208	7.86	33.988	3.00	-	-	152	300	6.66	34.03	2.39	26.72	133	0.64
235	7.58	34.012	2.77	-	-	146	400	6.14	34.12	1.27	26.86	120	0.77
278	6.87	34.015	2.62	-	-	137	500	5.46	34.19	0.84	27.00	107	0.89
336	6.41	34.053	1.94	-	-	128	600	(4.80)	(34.21)	(0.61)	(27.09)	(98)	(0.99)
426	6.06	34.152	1.08	-	-	116							
510	5.38	34.192	0.81	-	-	105							
581	4.90	34.210	0.65	-	-	99							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 1.88 and 1.94°C.

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
60.140	ALEXANDER AGASSIZ; April 25, 1963; 1220 GCT; 34°56.5'N, 129°19.5'W; sounding, 2568 fm; wind, 340°, force 8; weather, partly cloudy; sea, high; wire angle, 25°.												
2	14.64	33.339	5.97	0.36	2	317	0	(14.64)	(33.34)	(5.97)	(24.79)	(317)	(0.00)
10	14.64	33.340	5.88	0.32	2	317	10	14.64	33.34	5.88	24.79	317	0.03
33	14.7	33.338	5.89	0.28	2	318	20	14.7	33.34	5.88	24.78	318	0.06
61	14.70	33.364	5.81	0.40	2	316	30	14.7	33.34	5.89	24.78	318	0.10
70	14.75	33.375	5.90	0.37	2	316	50	14.7	33.36	5.84	24.79	316	0.16
89	13.80	33.511	5.99	-	-	287	75	14.78	33.41	5.91	24.81	314	0.24
104	12.62	33.514	5.75	-	-	265	100	12.80	33.51	5.79	25.30	268	0.31
117	12.01	33.567	5.55	-	-	250	125	11.47	33.57	5.47	25.60	240	0.38
146	10.05	33.583	5.36	-	-	215	150	9.79	33.60	5.36	25.92	210	0.43
165	9.28	33.672	5.34	-	-	196	200	9.27	33.97	4.91	26.29	174	0.53
193	9.32	33.944	4.83	-	-	177	250	8.73	34.03	4.80	26.42	161	0.62
226	9.00	34.018	5.07	-	-	166	300	7.86	34.00	3.81	26.53	151	0.70
254	8.68	34.030	4.75	-	-	161	400	6.10	34.01	2.26	26.78	128	0.84
301	7.82	33.999	3.80	-	-	151	500	5.44	34.12	1.18	26.95	112	0.97
363	6.56	33.989	2.75	-	-	135	600	5.04	34.22	0.58	27.07	100	1.08
460	5.62	34.072	1.56	-	-	117							
549	5.25	34.172	0.76	-	-	106							
623	4.94	34.235	0.52	-	-	97							
60.160	ALEXANDER AGASSIZ; April 25, 1963; 2358 GCT; 34°16.5'N, 130°41'W; sounding, 2750 fm; wind, 330°, force 5; weather, partly cloudy; sea, high; wire angle, 40°.												
1	15.48	33.509	5.96	0.27	2	322	0	(15.48)	(33.51)	(5.96)	(24.74)	(322)	(0.00)
10	15.48	33.509	5.94	0.32	2	322	10	15.48	33.51	5.94	24.74	322	0.03
41	15.5	33.507	5.94	0.27	1	322	20	15.5	33.51	5.94	24.73	322	0.06
69	15.47	33.503	5.82	0.30	2	322	30	15.5	33.51	5.94	24.73	322	0.10
85	15.45	33.505	5.91	0.28	2	321	50	15.5	33.51	5.90	24.73	322	0.16
97	15.68	33.694	5.87	0.32	2	312	75	15.46	33.50	5.86	24.74	322	0.24
112	15.10	33.898	5.77	-	-	285	100	15.67	33.72	5.85	24.86	310	0.32
128	14.16	33.828	5.71	-	-	271	125	14.30	33.84	5.73	25.25	273	0.40
145	12.94	33.706	5.56	-	-	256	150	12.50	33.67	5.50	25.48	251	0.46
168	10.96	33.578	5.37	-	-	230	200	9.73	33.74	5.18	26.03	198	0.58
192	9.71	33.647	5.29	-	-	205	250	8.92	33.90	4.79	26.29	174	0.67
211	9.75	33.834	5.03	-	-	192	300	8.28	34.00	4.34	26.47	157	0.76
239	9.06	33.877	4.80	-	-	178	400	6.63	33.99	3.07	26.70	136	0.91
274	8.64	33.979	4.72	-	-	164	500	5.48	34.07	1.55	26.90	116	1.04
317	8.03	34.002	4.08	-	-	153							
386	6.85	33.985	3.27	-	-	139							
464	5.78	34.020	2.04	-	-	123							
533	5.26	34.104	1.19	-	-	111							

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; April 26, 1963; 1510, 1156 GCT; 33°37'N, 132°06'W; sounding, 2716 fm; wind, 330°, force 3; weather, cloudy; sea, very rough; wire angle, 09°, 18°. 60.180

1	15.82	33.872	5.61	0.27	3	302	0	(15.82)	(33.87)	(5.61)	(24.94)	(302)	(0.00)
11	15.80	33.864	5.62	0.29	3	302	10	15.80	33.86	5.62	24.94	303	0.03
30	15.9	33.865	5.61	0.24	2	305	20	15.8	33.86	5.62	24.94	303	0.06
60	15.82	33.883	5.59	0.26	1	301	30	15.9	33.86	5.61	24.91	305	0.09
70	15.84	33.901	5.61	0.30	3	301	50	15.8	33.87	5.60	24.94	302	0.15
84	15.82	33.932	5.59	0.34	2	298	75	15.83	33.91	5.60	24.97	300	0.23
99	15.86	34.073	5.53	0.40	5	288	100	15.85	34.07	5.53	25.09	288	0.30
113	14.90	34.049	5.43	-	-	270	125	14.17	34.00	5.37	25.40	259	0.37
138	13.36	33.934	5.33	-	-	248	150	12.65	33.90	5.25	25.63	237	0.43
158	12.10	33.871	5.22	-	-	229	200	10.33	33.87	5.06	26.03	198	0.54
188	10.67	33.854	5.18	-	-	205	250	9.35	33.98	4.85	26.28	175	0.64
217	9.98	33.909	4.94	-	-	190	300	8.41	34.01	4.16	26.46	158	0.73
246	9.41	33.967	4.88	-	-	176	400	6.59	34.00	2.81	26.71	134	0.88
294	8.52	34.006	4.21	-	-	160	500	5.45	34.04	1.74	26.88	118	1.01
347	7.50	33.999	3.56	-	-	146	600	4.81	34.13	0.90	27.03	104	1.13
431	6.14	34.002	2.42	-	-	129							
515	5.16	34.057	1.37	-	-	113							
599	4.74	34.154	0.75	-	-	101							
550a)	5.20	34.064	1.35	-	-	113	1500	2.65	34.56	1.13	27.59	51	
645	4.72	34.160	0.82	-	-	101	2000	1.99	34.62	1.81	27.69	41	
1126	3.40	-	-	-	-		2500	1.72	34.65	2.26	27.74	37	
1365	2.90	34.550	1.01	-	-	54	3000	1.59	34.67	2.86	27.76	35	
1606	2.45b)	34.573	1.24	-	-	48	4000	1.48	34.70	3.48	27.80	32	
1847	2.12	34.603	1.58	-	-	44							
2087	1.93	34.626	1.84	-	-	40							
2326	1.80	34.641	2.08	-	-	38							
2565	1.70c)	34.651	2.34	-	-	37							
2805	1.63	34.661	2.59	-	-	36							
3045	1.58	34.670	2.92	-	-	35							
3284	1.50	34.683	3.05	-	-	33							
3522	1.50	34.683	3.26	-	-	33							
3761	1.49	34.691	3.29	-	-	32							
4000	1.48	34.695	3.48	-	-	32							
4237	1.52	34.698	3.47	-	-	32							
4476	1.52	34.697	3.48	-	-	32							
4714	1.55	34.701	3.59	-	-	32							
4954	1.58	34.694	3.53	-	-	33							

ALEXANDER AGASSIZ; April 26, 1963; 2338 GCT; 32°57'N, 133°27.5'W; sounding, 2400 fm; wind, 280°, force 3; weather, partly cloudy; sea, very rough; wire angle, 04°. 60.200

2	16.38	33.908	5.83	0.10	2	312	0	(16.38)	(33.91)	(5.83)	(24.84)	(312)	(0.00)
12	15.68	33.926	5.89	-	2	295	10	15.68	33.92	5.89	25.01	296	0.03
46	15.9	34.030	5.88	0.19	2	292	20	15.7	33.94	5.89	25.02	295	0.06
76	16.02	34.114	5.76	0.18	2	289	30	15.8	33.99	5.89	25.04	293	0.09
97	16.25	34.208	5.84	0.16	2	287	50	15.9	34.04	5.87	25.05	292	0.15
112	16.28	34.242	5.78	0.17	2	285	75	16.0	34.11	5.76	25.08	289	0.22
126	16.24	34.280	5.77	0.27	3	282	100	16.27	34.22	5.82	25.11	287	0.29
146	15.22	34.187	5.61	-	-	267	125	16.25	34.28	5.77	25.16	282	0.37
167	13.51	34.044	5.47	-	-	243	150	14.87	34.15	5.57	25.36	262	0.43
197	11.71	33.952	5.43	-	-	216	200	11.59	33.95	5.44	25.87	214	0.56
223	10.75	33.930	5.48	-	-	201	250	9.95	33.98	5.30	26.18	184	0.66
247	10.02	33.977	5.37	-	-	185	300	8.88	34.00	4.90	26.38	166	0.75
282	9.16	33.979	4.97	-	-	172	400	7.12	33.99	3.54	26.63	142	0.91
322	8.56	34.017	4.76	-	-	160	500	5.61	33.98	2.44	26.82	124	1.05
371	7.62	34.000	3.87	-	-	148	600	4.96	34.12	1.06	27.00	106	1.17
441	6.43	33.972	3.13	-	-	134							
526	5.34	34.008	2.08	-	-	119							
611	4.93	34.140	0.92	-	-	104							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 2.41 and 2.49°C.
c) Mean value of 1.66 and 1.73°C.

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
63.52	ALEXANDER AGASSIZ; April 20, 1963; 1350 GCT; 37°18.5'N, 122°37'W; sounding, 47 fm; wind, 220°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.												
1	12.38	30.855	6.61	0.33	22	456	0	(12.38)	(30.86)	(6.61)	(23.33)	(456)	(0.00)
11	12.34	31.762	6.48	0.31	17	388	10	12.35	31.70	6.50	23.99	393	0.04
31	11.1	32.469a)	5.64	0.21	9	315	20	12.2	31.90	6.39	24.17	376	0.08
51	10.17	33.225a)	5.51	0.26	16	243	30	11.2	32.42	5.66	24.75	320	0.12
							50	10.2	33.22	5.52	25.55	244	0.17
63.55	ALEXANDER AGASSIZ; April 20, 1963; 1147 GCT; 37°12.5'N, 122°49.5'W; sounding, 140 fm; wind, 240°, force 3; weather, clear; sea, moderate; wire angle, 13°.												
1	12.22	32.765	6.32	-	-	312	0	(12.22)	(32.76)	(6.32)	(24.83)	(313)	(0.00)
11	12.5	32.988	6.27	0.27	6	301	10	12.5	32.99	6.27	24.96	301	0.03
30	12.10	33.043	6.01	0.31	3	290	20	12.5	33.01	6.21	24.97	299	0.06
50	9.88	33.418	4.67	0.33	4	225	30	12.10	33.04	6.01	25.07	290	0.09
74	9.49	33.575	4.21	0.24	15	207	50	9.88	33.42	4.67	25.76	224	0.14
98	9.08	33.705	3.77	-	-	191	75	9.48	33.58	4.19	25.95	206	0.20
123	8.80	33.848	3.35	-	-	176	100	9.06	33.72	3.73	26.13	189	0.25
162	8.36	34.007	2.59	-	-	158	125	8.78	33.86	3.32	26.28	175	0.29
201	7.96	34.073	2.16	-	-	147	150	8.50	33.97	2.80	26.41	163	0.33
							200	7.96	34.07	2.17	26.57	147	0.41
63.60	ALEXANDER AGASSIZ; April 20, 1963; 0849 GCT; 37°03.5'N, 123°09.5'W; sounding, 1020 fm; wind, 270°, force 3; weather, partly cloudy; sea, rough; wire angle, 12°.												
1	12.11	33.281	6.29	0.40	5	272	0	(12.11)	(33.28)	(6.29)	(25.25)	(272)	(0.00)
11	12.11	33.276	6.32	0.36	4	273	10	12.11	33.28	6.31	25.25	272	0.03
30	11.4	33.379	5.96	0.38	6	253	20	12.1	33.28	6.32	25.26	272	0.05
40	9.84	33.634	4.78	0.43	15	208	30	11.4	33.38	5.96	25.46	253	0.08
55	9.50	33.723	4.17	0.38	19	196	50	9.55	33.70	4.33	26.03	198	0.13
69	9.14	33.828	3.37	-	-	183	75	9.07	33.86	3.17	26.24	179	0.17
94	8.88	33.939	2.76	-	-	170	100	8.81	33.95	2.70	26.35	169	0.22
114	8.64	33.986	2.64	-	-	163	125	8.59	34.00	2.57	26.42	162	0.26
134	8.52	34.009	2.53	-	-	160	150	8.01	33.97	3.12	26.48	156	0.30
153	7.94	33.966	3.15	-	-	155	200	7.57	34.05	2.40	26.61	143	0.38
184	7.67	34.024	2.69	-	-	147	250	7.17	34.10	1.73	26.71	134	0.45
218	7.47	34.076	2.10	-	-	140	300	6.21	34.05	1.97	26.80	126	0.51
247	7.21	34.107	1.72	-	-	134	400	5.68	34.11	1.28	26.91	115	0.64
296	6.24	34.046	1.98	-	-	127	500	5.40	34.24	0.67	27.05	102	0.75
350	5.93	34.066	1.63	-	-	121	600	5.14	34.33	0.48	27.15	92	0.86
433	5.53	34.157	1.01	-	-	110							
518	5.37	34.260	0.59	-	-	100							
602	5.13	34.330	0.48	-	-	92							
67.50	ALEXANDER AGASSIZ; April 19, 1963; 1546 GCT; 36°49'N, 122°04.5'W; sounding, 52 fm; wind, 300°, force 4; weather, cloudy; sea, rough; wire angle, 11°.												
1	12.80	33.301	6.31	0.60	7	284	0	(12.80)	(33.30)	(6.31)	(25.14)	(284)	(0.00)
11	12.80	33.298	6.32	0.64	7	284	10	12.80	33.30	6.32	25.14	284	0.03
31	12.8	33.301	6.26	0.66	7	284	20	12.8	33.30	6.30	25.14	284	0.06
49	10.34	33.618	4.43	-	-	217	30	12.8	33.30	6.28	25.14	284	0.09
75	9.37	33.816	3.37	-	-	187	50	10.26	33.62	4.39	25.85	216	0.14
							75	9.37	33.82	3.37	26.16	187	0.19

a) Salinity samples at 31 and 51 meters appear to have been reversed; they are assumed to be in correct order.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

67.55

ALEXANDER AGASSIZ; April 19, 1963; 2033, 1951 GCT; 36°39'N, 122°26'W; sounding, 1144 fm; wind, 330°, force 4; weather, partly cloudy; sea, rough; wire angle, 30°, 30°.

2	12.71	33.153	6.27	0.57	6	293	0	(12.71)	(33.15)	(6.27)	(25.04)	(293)	(0.00)
11	12.70	33.149	6.20	0.59	6	293	10	12.70	33.15	6.21	25.04	293	0.03
33	12.6	33.176	6.09	0.64	7	289	20	12.7	33.16	6.13	25.05	292	0.06
42	11.29	33.380	5.34	-	-	251	30	12.6	33.17	6.11	25.08	289	0.09
55	10.33	33.445	4.87	-	-	230	50	10.57	33.42	5.01	25.64	236	0.14
69	9.82	33.531	4.42	-	-	215	75	9.62	33.57	4.29	25.92	209	0.20
91	9.12	33.714	3.78	-	-	191	100	9.07	33.80	3.37	26.19	184	0.25
107	9.04	33.846	3.12	-	-	180	125	8.88	33.92	2.89	26.31	172	0.29
125	8.88	33.918	2.89	-	-	172	150	8.54	33.99	2.71	26.42	162	0.33
152	8.52	33.992	2.70	-	-	161	200	8.02	34.03	2.42	26.53	151	0.41
176	8.27	34.017	2.58	-	-	156	250	7.25	34.05	2.16	26.66	139	0.49
209	7.92	34.038	2.36	-	-	149	300	6.63	34.06	1.81	26.75	130	0.56
234	7.56	34.062	2.17	-	-	142	400	5.93	34.14	1.01	26.90	116	0.68
276	6.82	34.030	2.16	-	-	135	500	5.67	34.25	0.52	27.02	104	0.80
332	6.44	34.101	1.32	-	-	125	600	5.07	34.29	0.50	27.13	95	0.91
419	5.74	34.132	0.93	-	-	114	700	4.64	34.34	0.52	27.21	86	1.00
501	5.57	34.243	0.46	-	-	104	800	4.33	34.39	0.54	27.29	79	1.09
571	5.30	34.289	0.41	-	-	97	1000	3.79	34.45	0.66	27.39	69	1.26
							1200	3.30	34.51	1.01	27.49	60	1.41
426a)	5.86	34.183	0.94	-	-	112	1500	2.75	34.56	1.33	27.58	52	1.60
522	5.74	34.281	0.56	-	-	103	2000	(1.98)	(34.63)		(27.70)	(40)	(1.88)
620	4.92	34.282	0.65	-	-	94							
815	4.30	34.396	0.54	-	-	79							
1024	3.72	34.459	0.69	-	-	68							
1257	3.18	34.523	1.08	-	-	58							
1490	2.77	34.557	1.31	-	-	52							
1732	2.42	34.586	1.54	-	-	47							
1974	2.02	34.621	2.07	-	-	41							

67.60

ALEXANDER AGASSIZ; April 20, 1963; 0323, 0127 GCT; 36°29.5'N, 122°47.5'W; sounding, 1662 fm; wind, 310°, force 5; weather, rain; sea, very rough; wire angle, 05°, 08°.

1	12.88	33.067	6.37	0.48	3	302	0	(12.88)	(33.07)	(6.37)	(24.94)	(302)	(0.00)
11	12.93	33.06 b)	6.42	0.50	4	304	10	12.93	33.06	6.41	24.93	304	0.03
31	12.9	33.040	6.47	0.47	4	305	20	12.9	33.05	6.45	24.92	304	0.06
41	12.55	33.107	6.33	0.56	4	293	30	12.9	33.04	6.46	24.92	305	0.09
56	11.18	33.280	5.77	0.78	8	256	50	11.57	33.22	6.00	25.31	267	0.15
71	10.56	33.421	5.16	-	-	235	75	10.39	33.45	5.03	25.70	230	0.21
96	9.44	33.598	4.37	-	-	204	100	9.40	33.62	4.27	26.00	202	0.27
116	9.28	33.805	3.62	-	-	186	125	9.10	33.87	3.34	26.24	179	0.31
136	8.90	33.928	3.08	-	-	172	150	8.75	33.97	2.91	26.37	166	0.36
156	8.68	33.991	2.86	-	-	164	200	8.24	34.06	2.51	26.52	152	0.44
187	8.35	34.039	2.65	-	-	155	250	7.72	34.09	2.22	26.62	143	0.51
221	8.07	34.078	2.32	-	-	148	300	7.14	34.12	1.88	26.73	132	0.59
251	7.71	34.088	2.23	-	-	143	400	6.55	34.18	1.19	26.86	120	0.72
300	7.14	34.115	1.88	-	-	133	500	5.90	34.28	0.54	27.02	105	0.84
357	6.77	34.147	1.57	-	-	126	600	5.22	34.31	0.50	27.12	95	0.94
442	6.29	34.224	0.99	-	-	114	700	4.92	34.36	0.37	27.20	88	1.04
527	5.62	34.306	0.56	-	-	100	800	4.63	34.40	0.31	27.26	82	1.13
611	5.18	34.318	0.49	-	-	94	1000	3.90	34.46	0.53	27.39	70	1.30
							1200	3.38	34.52	0.77	27.49	60	1.45
418a)	6.50	34.212	0.79	-	-	117	1500	2.68	34.57	1.05	27.59	51	1.64
519	5.82	34.264	0.47	-	-	105	2000	2.05	34.62	1.73	27.69	42	1.92
766	4.74	34.391	0.31	-	-	84	2500	1.77	34.67	2.34	27.75	36	2.16
1015	3.84	34.468	0.54	-	-	69	3000	(1.62)	(34.69)	(2.65)	(27.77)	(33)	(2.38)
1264	3.22	34.529	0.83	-	-	58							
1511	2.66	34.568	1.06	-	-	51							
1757	2.28	34.603	1.47	-	-	45							
2004	2.04	34.625	1.75	-	-	41							
2252	1.88	34.646	2.05	-	-	39							
2498	1.76	34.665	2.33	-	-	36							
2745	1.68	34.673	2.46	-	-	35							
2992	1.62	34.688	2.65	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 33.11‰, not used in interpolation.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
70.53	ALEXANDER AGASSIZ; April 19, 1963; 0344 GCT; 36°07'N, 121°54'W; sounding, 525 fm; wind, 220°, force 2; weather, cloudy; sea, moderate; wire angle, 18°.												
1	13.46	33.307	6.21	0.09	7	296	0	(13.46)	(33.31)	(6.21)	(25.01)	(295)	(0.00)
10	12.80	33.300	6.29	0.09	7	284	10	12.80	33.30	6.29	25.14	284	0.03
29	11.7	33.435	5.34	0.06	12	254	20	12.7	33.32	6.23	25.17	280	0.06
48	10.22	33.616	4.01	0.00	18	215	30	11.6	33.44	5.29	25.47	252	0.08
57	9.96	33.669	3.81	0.00	20	207	50	10.12	33.63	3.95	25.88	213	0.13
66	9.75	33.723	3.51	-	-	200	75	9.52	33.76	3.41	26.08	194	0.18
80	9.38	33.786	3.38	-	-	189	100	8.99	33.88	3.20	26.26	177	0.23
94	9.06	33.863	3.24	-	-	179	125	8.77	33.93	3.26	26.34	170	0.27
108	8.92	33.897	3.20	-	-	174	150	8.50	33.98	3.20	26.42	162	0.31
130	8.72	33.941	3.28	-	-	168	200	7.89	34.02	2.67	26.54	150	0.39
159	8.40	33.986	3.13	-	-	160	250	7.40	34.08	2.11	26.66	139	0.47
192	7.98	34.012	-	-	-	152	300	7.03	34.11	1.73	26.74	132	0.54
257	7.35	34.086	2.05	-	-	138	400	6.43	34.20	0.98	26.89	117	0.67
354	6.70	34.148	1.33	-	-	125	500	5.86	34.28	0.58	27.02	104	0.78
476	6.00	34.268	0.61	-	-	107	600	5.33	34.32	0.52	27.12	95	0.89
623	5.22	34.327	0.51	-	-	94	700	4.87	34.37	0.51	27.21	87	0.99
773	4.58	34.404	0.52	-	-	81	800	4.47	34.42	0.55	27.30	79	1.08
852	4.28	34.440	0.59	-	-	75							
70.60	ALEXANDER AGASSIZ; April 18, 1963; 2329 GCT; 35°53'N, 122°24'W; sounding, 1670 fm; wind, 270°, force 3; weather, cloudy; sea, rough; wire angle, 08°.												
2	13.49	33.202	6.30	0.47	4	304	0	(13.49)	(33.20)	(6.30)	(24.92)	(304)	(0.00)
12	13.14	33.211	6.29	0.45	4	297	10	13.17	33.21	6.28	24.99	297	0.03
32	13.0	33.209	6.40	0.45	4	294	20	13.0	33.19	6.35	25.01	295	0.06
42	12.93	33.195	6.21	0.50	3	294	30	13.0	33.21	6.39	25.03	294	0.09
57	11.34	33.340	5.86	0.56	7	254	50	12.69	33.20	6.12	25.08	289	0.15
72	10.29	33.566	4.32	-	-	220	75	10.22	33.59	4.23	25.84	217	0.21
96	9.85	33.705	3.88	-	-	203	100	9.74	33.74	3.75	26.03	198	0.26
116	9.25	33.828	3.36	-	-	184	125	9.07	33.87	3.24	26.24	178	0.31
136	8.90	34.04 u	3.17	-	-		150	8.69	33.95	3.17	26.37	167	0.36
156	8.59	33.969	3.18	-	-	164	200	7.89	34.02	3.01	26.54	150	0.44
187	8.14	34.010	2.99	-	-	154	250	7.21	34.04	2.77	26.66	139	0.51
221	7.57	34.031	3.04	-	-	145	300	6.54	34.04	2.32	26.75	131	0.58
251	7.20	34.036	2.76	-	-	140	400	5.57	34.11	1.48	26.92	114	0.71
299	6.56	34.039	2.33	-	-	131	500	5.21	34.23	0.76	27.06	101	0.82
354	5.88	34.06 a)	1.91	-	-	121	600	4.79	34.30	0.59	27.17	91	0.92
438	5.40	34.167	1.14	-	-	108							
522	5.14	34.247	0.67	-	-	99							
606	4.76	34.302	0.59	-	-	90							
70.70	ALEXANDER AGASSIZ; April 18, 1963; 1809 GCT; 35°33.5'N, 123°05.5'W; sounding, 2040 fm; wind, 310°, force 3; weather, partly cloudy; sea, rough; wire angle, 22°.												
2	12.88	33.167	6.06	0.09	4	295	0	(12.88)	(33.17)	(6.06)	(25.02)	(295)	(0.00)
12	12.82	33.182	6.09	0.12	4	293	10	12.83	33.18	6.07	25.04	293	0.03
30	12.8	33.164	6.12	0.02	2	294	20	12.8	33.17	6.10	25.04	293	0.06
38	12.00	33.216	5.99	0.12	2	275	30	12.8	33.16	6.12	25.03	294	0.09
52	11.40	33.281	5.57	-	-	260	50	11.49	33.27	5.64	25.36	262	0.14
66	10.50	33.387	5.08	-	-	237	75	10.06	33.45	4.74	25.75	225	0.21
88	9.64	33.568	4.17	-	-	210	100	9.38	33.72	3.46	26.08	194	0.26
107	9.27	33.796	3.16	-	-	187	125	9.00	33.93	2.70	26.30	173	0.30
125	9.00	33.927	2.70	-	-	173	150	8.56	33.97	2.83	26.40	163	0.35
143	8.66	33.956	2.89	-	-	166	200	7.79	34.02	2.67	26.56	149	0.43
171	8.36	33.996	2.69	-	-	159	250	7.15	34.03	2.46	26.66	139	0.50
203	7.74	34.018	2.66	-	-	148	300	6.50	34.02	2.20	26.74	132	0.57
231	7.36	34.037	2.45	-	-	142	400	5.79	34.14		26.92	114	0.70
276	6.84	34.012	2.47	-	-	137	500	5.37	34.23		27.04	103	0.81
326	6.20	34.044	1.83	-	-	126							
408	5.76	34.147	-	-	-	113							
488	5.42	34.222	-	-	-	104							
568	5.00	34.290	0.37	-	-	94							

a) Alternate value, 34.11‰, not used in interpolation.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; April 18, 1963; 1300 GCT; 35°14'N, 123°50'W; sounding, 2160 fm; wind, 330°, force 6; weather, overcast; sea, very rough; wire angle, 22°.													70.80
1	13.96	33.083	6.20	0.14	4	322	0	(13.96)	(33.08)	(6.20)	(24.73)	(322)	(0.00)
11	13.98	33.079	6.15	0.18	4	322	10	13.98	33.08	6.15	24.73	322	0.03
30	14.0	33.080	6.13	0.19	4	323	20	14.0	33.08	6.14	24.73	323	0.06
58	13.98	33.078	6.06	0.19	4	323	30	14.0	33.08	6.13	24.73	323	0.10
66	13.78	33.058	6.20	0.17	5	320	50	14.0	33.08	6.07	24.73	323	0.16
80	11.88	33.110	5.83	-	-	281	75	12.50	33.10	5.95	25.04	293	0.24
93	10.48	33.202	5.53	-	-	250	100	9.88	33.27	5.22	25.64	235	0.31
107	9.68	33.314	4.98	-	-	229	125	9.70	33.60	3.91	25.93	208	0.36
130	9.70	33.669	3.76	-	-	203	150	8.90	33.75	3.75	26.18	185	0.41
147	8.96	33.743	3.78	-	-	186	200	8.27	33.95	3.27	26.43	161	0.50
176	8.64	33.873	3.40	-	-	172	250	7.55	34.02	2.75	26.59	145	0.58
203	8.20	33.952	3.26	-	-	160	300	7.00	34.04	2.35	26.68	137	0.65
230	7.73	33.983	2.99	-	-	151	400	5.87	34.09	1.35	26.87	119	0.78
278	7.32	34.044	2.49	-	-	141	500	5.11	34.15	0.89	27.01	106	0.90
328	6.49	34.031	2.16	-	-	131							
406	5.82	34.095	1.31	-	-	118							
485	5.19	34.137	0.94	-	-	107							
565	4.84	34.225	0.61	-	-	97							
ALEXANDER AGASSIZ; April 18, 1963; 0758 GCT; 34°53'N, 124°30'W; sounding, 2314 fm; wind, 340°, force 4; weather, cloudy; sea, very rough; wire angle, 20°.													70.90
1	14.06	33.045	5.93	0.29	3	327	0	(14.06)	(33.04)	(5.93)	(24.68)	(327)	(0.00)
10	14.06	33.045	5.97	0.35	5	327	10	14.06	33.04	5.97	24.68	327	0.03
34	14.1	33.045	5.97	0.35	4	327	20	14.1	33.04	5.97	24.67	328	0.07
62	14.08	33.043	5.93	0.31	4	327	30	14.1	33.04	5.97	24.67	328	0.10
71	13.56	33.037	6.00	0.29	8	317	50	14.1	33.04	5.94	24.67	328	0.16
90	12.35	33.094	5.78	-	-	291	75	13.22	33.04	5.98	24.85	311	0.24
105	11.65	33.165	5.56	-	-	273	100	11.89	33.14	5.63	25.19	279	0.32
119	10.84	33.307	5.31	-	-	248	125	10.49	33.36	5.13	25.61	239	0.38
148	9.66	33.509	-	-	-	214	150	9.62	33.52	4.52	25.88	213	0.44
168	9.28	33.692	4.06	-	-	195	200	8.75	33.86	3.43	26.29	174	0.54
196	8.80	33.845	3.49	-	-	176	250	8.09	34.00	2.80	26.50	154	0.62
231	8.44	33.981	2.95	-	-	161	300	7.32	34.04	2.20	26.64	141	0.70
260	7.92	34.012	2.70	-	-	151	400	6.19	34.08	1.50	26.82	123	0.84
307	7.24	34.048	2.15	-	-	139	500	5.33	34.15	0.85	26.99	108	0.96
370	6.49	34.064	1.76	-	-	128	600	4.84	34.23	0.60	27.11	97	1.07
467	5.61	34.122	1.01	-	-	113							
556	4.98	34.186	0.70	-	-	102							
632	4.78	34.273	0.52	-	-	93							
ALEXANDER AGASSIZ; April 17, 1963; 2133 GCT; 34°33'N, 125°13'W; sounding, 2420 fm; wind, 300°, force 5; weather, cloudy; sea, very rough; wire angle, 35°.													70.100
2	14.10	33.025	6.10	0.32	2	329	0	(14.10)	(33.02)	(6.10)	(24.66)	(329)	(0.00)
10	14.11	33.020	6.01	0.41	2	329	10	14.11	33.02	6.01	24.66	329	0.03
44	14.10	33.023	6.03	0.43	3	329	20	14.10	33.02	6.02	24.66	329	0.07
72	14.08	33.020	5.94	0.35	2	329	30	14.10	33.02	6.02	24.66	329	0.10
89	13.78	33.023	6.03	0.24	4	323	50	14.10	33.02	6.01	24.66	329	0.16
101	12.96	33.044	5.94	-	-	305	75	14.03	33.02	5.94	24.67	328	0.25
116	11.82	33.094	5.78	-	-	281	100	13.00	33.04	5.95	24.90	306	0.33
132	11.26	33.254	5.49	-	-	259	125	11.52	33.20	5.61	25.30	268	0.40
147	10.14	33.287	5.16	-	-	238	150	10.02	33.31	5.10	25.65	235	0.46
169	9.60	33.570	4.35	-	-	209	200	9.20	33.82	3.44	26.18	184	0.57
192	9.27	33.761	3.62	-	-	190	250	8.51	33.97	3.19	26.41	163	0.66
211	9.12	33.863	3.32	-	-	180	300	7.75	34.03	2.54	26.57	147	0.74
238	8.70	33.940	3.25	-	-	168	400	6.53	34.13	1.52	26.82	124	0.88
275	8.12	34.006	2.94	-	-	154	500	5.66	34.16	1.00	26.95	111	1.00
320	7.47	34.058	2.24	-	-	142							
391	6.62	34.122	1.59	-	-	126							
468	5.92	34.140	1.17	-	-	116							
534	5.38	34.185	0.78	-	-	106							

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
70.120	ALEXANDER AGASSIZ; April 17, 1963; 0953 GCT; 33°52'N, 126°42'W; sounding, 2510 fm; wind, 360°, force 5; weather, clear; sea, very high; wire angle, 35°.												
1	14.56	33.101	6.12	0.49	3	332	0	(14.56)	(33.10)	(6.12)	(24.62)	(333)	(0.00)
9	14.56	33.109	6.00	0.46	3	332	10	14.6	33.11	5.99	24.62	333	0.03
30	14.6	33.103	5.94	0.46	3	333	20	14.6	33.10	5.97	24.62	333	0.07
53	13.93	33.155	5.94	0.49	3	316	30	14.6	33.10	5.94	24.62	333	0.10
61	12.26	33.300	5.61	0.73	6	274	50	14.6	33.10	5.94	24.62	333	0.17
77	11.16	33.407	5.08	-	-	246	75	11.23	33.40	5.14	25.51	248	0.24
90	10.60	33.483	4.63	-	-	231	100	9.89	33.66	3.94	25.95	207	0.30
102	9.80	33.683	3.84	-	-	204	125	9.26	33.81	3.37	26.17	186	0.35
126	9.25	33.812	3.37	-	-	185	150	8.82	33.86	3.43	26.28	175	0.39
142	8.99	33.850	3.40	-	-	179	200	8.08	34.02	2.87	26.51	153	0.48
167	8.50	33.899	3.46	-	-	168	250	7.52	34.03	2.63	26.60	144	0.55
195	8.14	34.010	2.93	-	-	154	300	6.80	34.04	2.36	26.71	134	0.62
220	7.84	34.024	2.75	-	-	149	400	6.17	34.15	1.19	26.88	118	0.75
259	7.42	34.028	-	-	-	143	500	5.26	34.18	0.83	27.02	105	0.87
312	6.66	34.039	2.28	-	-	132							
395	6.20	34.148	1.22	-	-	118							
470	5.54	34.171	0.93	-	-	109							
534	4.95	34.202	0.70	-	-	100							
70.200	ALEXANDER AGASSIZ; April 27, 1963; 1222 GCT; 31°12.5'N, 132°02'W; sounding, 2600 fm; wind, 100°, force 2; weather, partly cloudy; sea, moderate; wire angle, 10°.												
0	16.48	33.939	5.87	0.23	2	312	0	16.48	33.94	5.87	24.84	312	0.00
10	16.50	33.930	5.81	0.28	2	313	10	16.50	33.93	5.81	24.83	313	0.03
45	16.5	33.937	5.83	0.26	2	312	20	16.5	33.93	5.82	24.83	313	0.06
74	16.50	33.939	5.69	0.28	2	312	30	16.5	33.94	5.82	24.84	312	0.09
94	16.64	34.140	5.75	0.25	3	301	50	16.5	33.94	5.80	24.84	312	0.16
109	16.52	34.309	5.67	0.23	2	286	75	16.51	33.94	5.69	24.84	312	0.24
124	14.47	33.966	5.72	-	-	267	100	16.61	34.22	5.73	25.03	294	0.31
143	13.30	33.880	5.47	-	-	250	125	14.40	33.96	5.71	25.32	266	0.38
163	11.94	33.766	5.43	-	-	234	150	12.83	33.84	5.46	25.55	245	0.45
192	10.17	33.725	5.13	-	-	206	200	10.00	33.75	5.10	26.00	202	0.56
217	9.70	33.819	5.06	-	-	192	250	9.26	33.98	4.91	26.30	173	0.66
240	9.36	33.956	4.99	-	-	177	300	8.78	34.01	4.68	26.40	164	0.74
274	9.04	34.000	4.77	-	-	168	400	6.83	34.00	3.31	26.68	137	0.90
313	8.60	34.018	4.64	-	-	160	500	5.52	34.05	1.80	26.88	118	1.03
361	7.46	34.012	3.83	-	-	145	600	4.79	34.16	0.93	27.06	101	1.15
430	6.33	33.992	2.92	-	-	132							
514	5.38	34.063	1.57	-	-	115							
600	4.79	34.157	0.93	-	-	102							
73.53	ALEXANDER AGASSIZ; April 10, 1963; 0742 GCT; 35°31'N, 121°28'W; sounding, 400 fm; wind, 140°, force 1; weather, cloudy; sea, moderate; wire angle, 03°.												
1	14.38	33.182	6.30	0.32	1	323	0	(14.38)	(33.18)	(6.30)	(24.72)	(323)	(0.00)
11	14.30	33.191	5.93	0.36	1	321	10	14.31	33.19	5.95	24.75	321	0.03
31	12.6	33.256	5.93	0.52	3	283	20	14.1	33.20	5.93	24.80	316	0.06
41	11.4	33.369	5.21	0.95	6	253	30	12.8	33.24	5.93	25.09	288	0.09
51	10.72	33.423	5.05	1.02	9	238	50	10.8	33.41	5.08	25.59	240	0.15
66	10.01	33.494	4.79	-	-	221	75	9.79	33.59	4.50	25.91	210	0.20
81	9.68	33.647	4.20	-	-	204	100	9.39	33.76	3.75	26.11	192	0.25
102	9.36	-	-	-	-		125	8.98	33.87	3.51	26.26	177	0.30
125	8.98	33.872	3.51	-	-	177	150	8.67	33.94	3.58	26.36	167	0.34
145	8.73	33.933	3.58	-	-	169	200	8.15	34.01	3.26	26.50	155	0.43
176	8.37	33.986	3.44	-	-	159	250	7.55	34.07	2.38	26.63	142	0.50
205	8.10	34.014	3.19	-	-	154	300	7.05	34.09	1.95	26.72	134	0.57
236	7.71	34.047	2.62	-	-	146	400	5.88	34.11	1.37	26.89	117	0.70
276	7.30	34.099	2.07	-	-	136	500	5.60	34.24	0.70	27.02	104	0.82
335	6.65	34.090	1.77	-	-	128							
410	5.82	34.117	1.30	-	-	116							
484	5.65	34.222	0.77	-	-	106							
565	5.33	34.280	0.58	-	-	98							

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; April 11, 1963; 1242 GCT; 35°17.5'N, 121°57'W; sounding, 1200 fm; wind, 140°, force 2; weather, cloudy; sea, moderate; wire angle, 09°.													7360
1	14.52	33.186	6.40	0.29	2	325	0	(14.52)	(33.19)	(6.40)	(24.70)	(325)	(0.00)
11	14.36	33.174	6.48	0.34	2	323	10	14.37	33.17	6.47	24.72	324	0.03
31	13.8	33.184	6.46	0.35	3	311	20	14.3	33.20	6.47	24.76	320	0.06
40	13.4	33.163	6.30	0.49	3	305	30	13.9	33.18	6.46	24.82	314	0.10
50	12.93	33.217	6.30	0.52	3	292	50	12.93	33.22	6.30	25.05	292	0.16
66	11.94	33.176	6.03	-	-	277	75	11.20	33.25	5.92	25.40	259	0.23
81	11.11	33.329	5.83	-	-	251	100	9.85	33.42	5.15	25.77	224	0.29
100	9.85	33.425	5.15	-	-	224	125	9.34	33.75	4.10	26.11	191	0.34
149	8.92	33.885	3.70	-	-	175	150	8.90	33.89	3.70	26.29	174	0.39
249	7.40	34.000a)	3.47	-	-	145	200	8.03	33.95	3.60	26.47	157	0.47
347	6.62	34.102	1.89	-	-	127	250	7.39	34.00	3.46	26.60	145	0.55
445	5.94	34.211	1.22	-	-	111	300	6.95	34.05	2.65	26.70	135	0.62
544	5.21	34.244	0.84	-	-	100	400	6.24	34.17	1.50	26.89	117	0.75
643	4.83	34.291	0.82	-	-	92	500	5.53	34.23	0.94	27.02	104	0.87
790	4.26	34.374	0.68	-	-	80	600	4.97	34.26	0.83	27.11	96	0.97
989	3.78	34.496	0.77	-	-	66	700	4.61	34.32	0.79	27.20	87	1.07
1187	3.36	34.523	1.12	-	-	60	800	4.21	34.38	0.68	27.29	79	1.16
1384	2.94	34.568	1.44	-	-	53	1000	3.76	34.50	0.78	27.44	65	1.32
1582	2.58	34.577	1.75	-	-	49	1200	3.32	34.53	1.14	27.50	59	1.47
1730	2.33	34.613	1.78	-	-	44	1500	2.72	34.57	1.61	27.59	51	1.66
ALEXANDER AGASSIZ; April 12, 1963; 0003 GCT; 35°02'N, 120°56'W; sounding, 140 fm; wind, 170°, force 3; weather, partly cloudy; sea, moderate; wire angle, 05°.													7751
0	12.90	33.445	-	0.85	10	275	0	12.90	33.44		25.23	275	0.00
10	11.87	33.498	5.57	0.98	12	252	10	11.87	33.50	5.57	25.47	252	0.03
30	9.86	33.74	3.05	1.43	19	200	20	11.32	33.58	4.66	25.63	236	0.05
50	9.50	33.807	3.37	1.92	23	190	30	9.86	33.74	3.05	26.01	200	0.07
75	9.19	33.966	2.48	2.16	26	173	50	9.50	33.81	3.37	26.13	190	0.11
100	8.92	34.015	2.28	-	-	165	75	9.19	33.97	2.48	26.30	173	0.16
125	8.64	34.064	2.17	-	-	158	100	8.92	34.02	2.28	26.38	165	0.20
165	8.18	34.148	1.80	-	-	145	125	8.64	34.06	2.17	26.46	158	0.24
205	8.06	34.171	1.57	-	-	141	150	8.32	34.12	1.98	26.56	149	0.28
							200	8.07	34.17	1.60	26.63	142	0.35
ALEXANDER AGASSIZ; April 11, 1963; 2015 GCT; 34°55'N, 121°13.5'W; sounding, 310 fm; wind, 140°, force 3; weather, cloudy; sea, moderate; wire angle, 15°.													7755
1	14.30	33.202	6.23	0.40	2	320	0	(14.30)	(33.20)	(6.23)	(24.76)	(320)	(0.00)
11	13.96	33.217	6.34	0.38	2	312	10	14.01	33.22	6.33	24.83	313	0.03
30	12.8	33.267	6.07	0.56	3	286	20	13.3	33.25	6.24	25.00	297	0.06
41	12.5	33.278	5.82	0.64	4	280	30	12.8	33.27	6.07	25.11	286	0.09
50	11.36	33.280	5.41	-	-	259	50	11.36	33.28	5.41	25.39	259	0.15
60	10.59	33.346	5.33	-	-	241	75	10.04	33.60	4.15	25.87	214	0.21
69	10.24	33.556	4.33	-	-	220	100	9.40	33.76	3.66	26.10	192	0.26
84	9.74	33.656	3.93	-	-	205	125	9.13	33.87	3.30	26.23	179	0.30
98	9.44	33.748	3.68	-	-	193	150	8.96	33.97	2.71	26.34	169	0.35
111	9.28	33.814	3.58	-	-	186	200	8.34	34.15	2.12	26.58	147	0.43
135	9.03	33.911	3.08	-	-	175	250	7.93	34.17	1.58	26.65	140	0.50
164	8.86	34.040	2.29	-	-	163	300	7.62	34.21	1.29	26.73	132	0.57
196	8.38	34.142	2.13	-	-	148	400	7.10	34.24	0.98	26.83	123	0.71
245	7.97	34.164	1.61	-	-	141	500	(6.12)	(34.26)	(0.75)	(26.97)	(109)	(0.83)
291	7.68	34.209	1.33	-	-	133							
389	7.16	34.242	1.00	-	-	124							
487	6.23	34.262	0.77	-	-	110							

a) Alternate value, 34.17‰, not used in interpolation.

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
77.57	ALEXANDER AGASSIZ; April 11, 1963; 1818 GCT; 34°51.5'N, 121°23'W; sounding, 230 fm; wind, 140°, force 3; weather, partly cloudy; sea, moderate; wire angle, 20°.												
1	14.46	33.186	5.97	0.42	2	324	0	(14.46)	(33.19)	(5.97)	(24.71)	(324)	(0.00)
11	14.37	33.18	5.98	0.40	2	323	10	14.38	33.18	5.98	24.72	323	0.03
29	13.7	33.197	6.23	0.37	3	308	20	14.3	33.18	5.98	24.74	321	0.06
48	12.1	33.232	5.72	-	-	276	30	13.3	33.20	6.16	24.96	300	0.10
72	11.03	33.407	4.97	-	-	244	50	12.0	33.24	5.67	25.24	273	0.15
95	10.48	33.495	4.51	-	-	229	75	11.02	33.42	4.93	25.56	243	0.22
119	9.85	33.619	4.20	-	-	209	100	10.38	33.52	4.44	25.75	225	0.28
158	9.06	33.931	3.00	-	-	174	125	9.69	33.66	4.08	25.98	204	0.33
197	8.76	34.051	2.32	-	-	160	150	9.17	33.88	3.27	26.24	179	0.38
245	7.90	34.126	1.85	-	-	142	200	8.73	34.05	2.30	26.44	160	0.47
294	7.08	-	-	-	-		250	7.81	34.13	1.81	26.64	141	0.54
344	6.78	34.193	1.25	-	-	122	300	7.01	34.18	1.41	26.79	126	0.61
80.52	ALEXANDER AGASSIZ; April 12, 1963; 1151 GCT; 34°25'N, 120°35.5'W; sounding, 105 fm; wind, 100°, force 2; weather, clear; sea, moderate; wire angle, 00°.												
1	12.32	33.505	6.30	0.69	8	260	0	(12.32)	(33.50)	(6.30)	(25.38)	(260)	(0.00)
11	11.88	33.563	5.83	0.82	12	248	10	11.90	33.56	5.85	25.51	248	0.03
31	10.76	33.732	-	1.03	16	216	20	11.26	33.65		25.70	230	0.05
51	10.26	33.834	-	0.85	19	200	30	10.79	33.73		25.84	216	0.07
76	9.67	33.940	2.55	0.85	25	183	50	10.28	33.83		26.01	200	0.11
101	9.44	33.981	2.23	-	-	176	75	9.68	33.94		26.20	183	0.16
126	9.22	34.022	2.14	-	-	169	100	9.45	33.98	2.25	26.27	176	0.21
157	9.06	34.062	2.09	-	-	164	125	9.23	34.02	2.14	26.33	170	0.25
181	8.79	34.115	1.84	-	-	156	150	9.10	34.05	2.10	26.38	166	0.29
80.55	ALEXANDER AGASSIZ; April 12, 1963; 1430 GCT; 34°19'N, 120°48'W; sounding, 395 fm; wind, 330°, force 3; weather, partly cloudy; sea, moderate; wire angle, 09°.												
1	12.83	33.458	7.19	0.55	6	273	0	(12.83)	(33.46)	(7.19)	(25.25)	(272)	(0.00)
11	12.42	33.463	6.92	0.74	5	265	10	12.45	33.46	6.94	25.33	265	0.03
36	10.9	33.445	5.17	0.80	10	239	20	12.3	33.46	6.74	25.36	263	0.05
46	10.42	33.613	4.78	0.92	13	219	30	11.1	33.44	5.43	25.56	243	0.08
61	10.21	33.689	4.41	-	-	210	50	10.34	33.64	4.67	25.85	216	0.12
75	9.77	33.841	3.37	-	-	191	75	9.77	33.84	3.37	26.11	192	0.18
99	9.31	33.962	2.94	-	-	175	100	9.30	33.96	2.92	26.28	175	0.22
119	9.05	34.004	2.50	-	-	168	125	8.99	34.03	2.36	26.38	165	0.27
138	8.85	34.070	2.14	-	-	160	150	8.73	34.10	2.00	26.48	156	0.31
174	8.58	34.130	1.88	-	-	152	200	8.50	34.15	1.80	26.55	149	0.38
209	8.44	34.162	1.74	-	-	147	250	8.03	34.21	1.45	26.67	138	0.46
253	8.00	34.213	1.43	-	-	137	300	7.63	34.24	1.20	26.75	130	0.53
287	7.74	34.239	1.20	-	-	132	400	6.91	34.27	0.89	26.88	118	0.66
341	7.26	34.251	1.21	-	-	124	500	6.11	34.28	0.72	26.99	107	0.78
410	6.84	34.270	0.86	-	-	117	600	5.50	34.34	0.55	27.11	96	0.88
510	6.04	34.280	0.71	-	-	107	700	(4.89)	(34.39)	(0.57)	(27.23)	(85)	(0.98)
604	5.48	34.345	0.54	-	-	95							
693	4.94	34.393	0.57	-	-	86							

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; April 12, 1963; 2145, 1946 GCT; 34°08.5'N, 121°08.5'W; sounding, 1105 fm; wind, 140°, force 3; weather, clear; sea, moderate; wire angle, 16°, 10°.

80.60

1	13.74	33.409	6.55	0.60	6	294	0	(13.74)	(33.41)	(6.55)	(25.03)	(293)	(0.00)
11	13.30	33.416	6.47	0.62	7	285	10	13.33	33.41	6.48	25.12	286	0.03
30	11.2	33.427	5.04	0.61	8	246	20	11.8	33.42	5.30	25.42	257	0.06
40	11.10	33.503	5.04	-	-	238	30	11.2	33.43	5.04	25.54	245	0.08
54	10.29	33.651	4.37	-	-	214	50	10.59	33.60	4.66	25.78	223	0.13
68	9.72	33.770	3.61	-	-	196	75	9.64	33.79	3.52	26.09	193	0.18
93	9.46	33.834	3.27	-	-	187	100	9.30	33.88	3.11	26.21	181	0.23
111	9.03	33.941	2.89	-	-	173	125	8.85	33.99	2.69	26.37	166	0.27
132	8.78	34.002	2.61	-	-	164	150	8.56	34.02	2.59	26.44	160	0.31
150	8.56	34.020	2.59	-	-	160	200	7.63	34.03	2.77	26.59	146	0.39
181	7.84	34.031	2.78	-	-	149	250	6.99	34.06	2.01	26.70	135	0.46
215	7.46	34.033	2.71	-	-	143	300	6.40	34.07	1.70	26.79	127	0.53
244	7.06	34.057	2.09	-	-	136	400	6.08	34.20	0.84	26.93	113	0.65
293	6.47	34.073	1.76	-	-	127	500	5.80	34.28	0.56	27.03	104	0.77
347	6.02	34.113	1.19	-	-	119	600	5.25	34.30	0.50	27.11	96	0.88
431	6.10	34.243	0.55	-	-	110	700	4.79	34.35	0.52	27.21	87	0.97
516	5.70	34.287	0.42	-	-	102	800	4.42	34.39	0.57	27.28	80	1.07
600	5.24	34.327	0.32	-	-	94	1000	3.79	34.46	0.74	27.40	69	1.23
							1200	3.39	34.52	1.02	27.49	60	1.38
482a)	5.92	34.263	0.72	-	-	106	1500	2.77	34.56	1.37	27.58	52	1.57
631	5.12	34.282	0.66	-	-	96	2000	(1.97)	(34.64)		(27.71)	(40)	(1.85)
778	4.50	34.383	0.57	-	-	82							
975	3.86	34.447	0.70	-	-	70							
1221	3.34	34.526	1.04	-	-	60							
1466	2.82	34.557	1.33	-	-	53							
1712	2.44	34.592	1.71	-	-	47							
1958	2.06	34.631	2.21	-	-	41							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO

CCOFI
6304

80.70

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; April 14, 1963; 1452, 1137 GCT; 33°47'N, 121°51.5'W; sounding, 2015 fm; wind, 260°, force 6; weather, partly cloudy; sea, very rough; wire angle, 20°, 28°.

1	14.81	33.320	5.89	0.39	2	321	0	(14.81)	(33.32)	(5.89)	(24.74)	(321)	(0.00)
10	14.80	33.309	5.88	0.43	2	322	10	14.80	33.31	5.88	24.73	322	0.03
34	13.9	33.327	6.08	0.40	3	303	20	14.8	33.31	5.88	24.73	322	0.06
45	13.39	33.344	6.02	-	-	292	30	14.1	33.32	6.07	24.89	307	0.10
59	12.62	33.371	5.72	-	-	275	50	13.11	33.35	5.95	25.11	286	0.16
74	12.30	33.547	5.61	-	-	256	75	12.29	33.55	5.60	25.43	256	0.22
97	10.84	33.461	4.83	-	-	237	100	10.50	33.48	4.53	25.70	230	0.28
117	10.15	33.675	3.87	-	-	210	125	9.80	33.71	3.76	26.00	202	0.34
136	9.50	33.748	3.67	-	-	194	150	9.22	33.81	3.37	26.17	185	0.39
166	8.99	33.903	2.97	-	-	175	200	8.61	34.01	2.54	26.43	161	0.48
195	8.64	33.994	2.62	-	-	163	250	8.19	34.10	1.95	26.56	148	0.56
234	8.35	34.077	2.14	-	-	152	300	7.79	34.18	1.29	26.68	137	0.63
264	8.06	34.113	1.81	-	-	146	400	7.02	34.26	0.64	26.85	120	0.76
313	7.70	34.194	1.18	-	-	135	500	6.19	34.29	0.41	26.99	108	0.88
377	7.22	34.244	0.73	-	-	124	600	5.52	34.33	0.35	27.10	97	0.99
476	6.38	34.287	0.44	-	-	110	700	5.01	34.38	0.40	27.20	87	1.09
566	5.72	34.302	0.34	-	-	101	800	4.51	34.40	0.45	27.28	80	1.19
640	5.32	34.343	0.30	-	-	94	1000	3.95	34.49	0.79	27.41	68	1.35
739	4.84	34.399	0.28	-	-	84	1200	3.40	34.53	0.86	27.49	60	1.50
839	4.36	34.414	0.31	-	-	78	1500	2.79	34.57	1.52	27.58	51	1.69
							2000	2.09	34.63	2.25	27.69	41	1.97
667a)	5.17	34.370	0.47	-	-	90	2500	1.81	34.66	2.70	27.74	37	2.21
808	4.46	34.411	0.59	-	-	79	3000	1.65	34.67	2.87	27.76	35	2.44
949	4.07	34.479	0.79	-	-	70							
1136	3.57	34.514	0.79	-	-	63							
1370	3.01	34.555	1.24	-	-	54							
1607	2.62	34.579	1.73	-	-	49							
1843	2.28	34.609	2.12	-	-	44							
2079	2.02	34.635	2.29	-	-	40							
2315	1.88	34.633	2.36	-	-	40							
2554	1.80	34.660	2.72	-	-	37							
2791	1.70	34.664	2.84	-	-	36							
3032	1.64	34.673	2.88	-	-	35							
3273	1.59	34.680	3.02	-	-	34							
3515	1.56	34.673	3.10	-	-	34							
3664	1.52	34.691	3.21	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; April 15-14, 1963; 0029, 2105 GCT; 33°26'N, 122°32'W; sounding, 2240 fm; wind, 250°, force 6; weather, partly cloudy; sea, high; wire angle, 33°, 20°.

2	14.74	33.171	6.11	0.40	1	331	0	(14.74)	(33.17)	(6.11)	(24.64)	(331)	(0.00)
10	14.74	33.174	5.84	0.38	2	331	10	14.74	33.17	5.84	24.64	331	0.03
31	14.3	33.167	5.94	0.42	2	322	20	14.7	33.18	5.85	24.66	329	0.07
39	13.70	33.176	6.47	0.50	2	310	30	14.4	33.17	5.91	24.71	324	0.10
52	13.23	33.222	5.90	-	-	297	50	13.30	33.21	5.96	24.97	300	0.16
65	12.52	33.275	5.67	-	-	280	75	12.20	33.32	5.54	25.27	271	0.23
86	11.32	33.365	5.19	-	-	252	100	10.50	33.47	4.63	25.69	231	0.30
104	10.38	33.511	4.47	-	-	226	125	10.00	33.69	3.70	25.95	206	0.35
121	10.07	33.667	3.81	-	-	209	150	9.24	33.82	3.44	26.18	185	0.40
148	9.28	33.805	3.45	-	-	186	200	8.29	33.99	3.09	26.46	158	0.49
174	8.83	33.951	3.30	-	-	169	250	7.52	34.02	2.71	26.60	145	0.57
209	8.12	34.001	2.98	-	-	155	300	6.79	34.01	2.70	26.69	136	0.64
235	7.79	34.030	2.54	-	-	148	400	6.27	34.16	1.00	26.88	118	0.77
279	7.01	33.994	3.05	-	-	140	500	5.67	34.24	0.51	27.02	105	0.89
342	6.53	34.089	1.76	-	-	127	600	5.43	34.35	0.42	27.13	94	0.99
433	5.93	34.174	0.79	-	-	113	700	4.79	34.36	0.37	27.21	86	1.09
517	5.56	34.260	0.50	-	-	102	800	4.37	34.40	0.45	27.29	79	1.18
587	5.50	34.345	0.44	-	-	95	1000	3.86	34.48	0.76	27.41	68	1.35
							1200	3.40	34.52	0.91	27.49	61	1.49
424a)	6.34	34.185	0.79	-	-	117	1500	2.75	34.57	1.26	27.59	51	1.69
523	5.62	34.193u	1.16u	-	-		2000	2.13	34.62	2.19	27.68	42	1.97
621	5.33	34.348	0.33	-	-	93	2500	1.82	34.66	2.40	27.74	37	2.21
718	4.68	34.368	0.38	-	-	85	3000	1.65	34.67	2.79	27.76	35	2.44
817	4.32	34.407	0.46	-	-	78							
1013	3.82	34.480	0.79	-	-	68							
1259	3.26	34.529	0.97	-	-	59							
1751	2.38	34.606	1.66	-	-	45							
1996	2.14	34.626	2.18	-	-	42							
2240	1.97	34.644	2.27	-	-	39							
2484	1.83	34.651	2.39	-	-	38							
2728	1.74	34.663	2.61	-	-	36							
2972	1.66	34.672	2.79	-	-	35							
3214	1.59	34.682	2.79	-	-	34							
3458	1.56	34.684	3.03	-	-	33							
3699	1.54	34.685	3.09	-	-	33							
3943	1.50	34.692	3.35	-	-	32							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO

CCOFI
6304

80.90

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; April 15, 1963; 1505, 1200 GCT; 33°10'N, 123°15.5'W; sounding, 2342 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 15°, 12°.													
1	15.16	33.329	5.88	0.40	3	328	0	(15.16)	(33.33)	(5.88)	(24.67)	(328)	(0.00)
11	15.17	33.320	5.90	0.38	2	329	10	15.17	33.32	5.89	24.66	329	0.03
30	15.1	33.328	5.92	0.37	2	327	20	15.2	33.32	5.91	24.65	330	0.07
40	14.31	33.403	5.96	0.40	3	305	30	15.1	33.33	5.92	24.68	327	0.10
55	13.40	33.511	5.34	-	-	279	50	13.80	33.47	5.65	25.07	290	0.16
70	12.60	33.527	5.12	-	-	263	75	12.33	33.53	5.04	25.41	258	0.23
95	11.20	33.545	4.48	-	-	237	100	10.90	33.56	4.37	25.69	231	0.29
114	10.06	33.652	4.07	-	-	210	125	9.81	33.72	3.83	26.01	201	0.35
134	9.60	33.765	3.55	-	-	194	150	9.25	33.79	3.10	26.15	187	0.39
154	9.18	33.801	3.01	-	-	185	200	8.49	33.99	2.86	26.43	161	0.48
184	8.77	33.951	2.93	-	-	168	250	7.59	34.05	2.24	26.61	144	0.56
218	8.12	34.012	2.68	-	-	154	300	7.24	34.11	1.71	26.71	135	0.63
249	7.60	34.048	2.25	-	-	144	400	6.27	34.15	0.90	26.87	119	0.77
298	7.26	34.109	1.73	-	-	135	500	5.85	34.25	0.57	27.00	107	0.88
352	6.46	34.096	1.40	-	-	126	600	5.28	34.33	0.32	27.13	94	0.99
436	6.11	34.198	0.66	-	-	114	700	4.89	34.39	0.32	27.23	85	1.09
521	5.70	34.299	0.43	-	-	101	800	4.52	34.43	0.37	27.30	78	1.18
605	5.24	34.339	0.31	-	-	93	1000	3.85	34.48	0.54	27.41	68	1.34
							1200	3.37	34.52	0.80	27.49	60	1.49
418a)	6.32	34.162	0.87	-	-	119	1500	2.81	34.57	1.28	27.58	52	1.68
513	5.80	34.238	0.60	-	-	107	2000	2.14	34.62	2.11	27.68	42	1.96
759	4.68	34.413	0.33	-	-	81	2500	1.82	34.65	2.47	27.73	38	2.21
1007	3.82	34.485	0.58	-	-	67	3000	1.63	34.67	2.77	27.76	35	2.44
1254	3.26	34.530	0.87	-	-	59	4000	1.50	34.68	3.39	27.77	33	2.90
1502	2.80	34.568	1.29	-	-	52							
1749	2.37	34.602	1.65	-	-	46							
1999	2.14	34.624	2.13	-	-	42							
2247	1.94	34.637	2.27	-	-	40							
2495	1.82	34.649	2.46	-	-	38							
2740	1.70	-	-	-	-								
2990	1.64	-	-	-	-								
3235	1.58	34.670	2.95	-	-	35							
3482	1.54	34.671	2.97	-	-	34							
3728	1.50	34.685	3.13	-	-	33							
3975	1.50	34.684	3.38	-	-	33							
4226	1.52	34.685	3.49	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.

80.100

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; April 15, 1963; 2344, 2021 GCT; 32°49.5'N, 123°56'W; sounding, 2160 fm; wind, 320°, force 4; weather, partly cloudy; sea, very rough; wire angle, 28°, 45°.

2	15.20	33.405	5.87	0.40	2	323	0	(15.20)	(33.40)	(5.87)	(24.72)	(324)	(0.00)
11	15.20	33.406	5.87	0.40	2	323	10	15.20	33.41	5.87	24.72	323	0.03
33	15.0	33.409	5.90	0.42	2	319	20	15.2	33.41	5.87	24.72	323	0.06
59	12.91	33.470	5.46	0.72	4	273	30	15.1	33.41	5.88	24.75	321	0.10
68	12.38	33.509	5.14	-	-	261	50	13.1	33.44	5.58	25.19	279	0.16
85	10.81	33.516	4.81	-	-	232	75	11.76	33.51	5.00	25.50	249	0.22
97	10.48	33.646	4.03	-	-	217	100	10.39	33.67	3.89	25.87	214	0.28
110	9.89	33.752	3.43	-	-	200	125	9.55	33.85	3.09	26.15	187	0.33
136	9.32	33.890	3.01	-	-	181	150	9.03	33.90	3.24	26.27	176	0.38
153	8.98	33.900	3.30	-	-	175	200	8.32	34.03	2.59	26.49	155	0.46
177	8.64	33.981	2.84	-	-	164	250	7.67	34.08	1.90	26.62	143	0.54
207	8.23	34.044	2.51	-	-	153	300	7.17	34.13	1.48	26.73	132	0.61
233	7.85	34.070	2.06	-	-	146	400	6.47	34.21	0.70	26.89	117	0.74
275	7.46	34.105	1.72	-	-	138	500	5.82	34.28	0.42	27.03	104	0.86
331	6.84	34.151	1.21	-	-	126	600	4.81	34.28	0.41	27.15	93	0.96
420	6.39	34.232	0.60	-	-	115	700	4.59	34.37	0.40	27.24	84	1.06
502	5.76	34.276	0.45	-	-	104	800	4.32	34.42	0.45	27.31	77	1.14
572	4.92	34.264	0.40	-	-	95	1000	3.72	34.51	0.66	27.45	64	1.30
							1200	3.25	34.53	0.93	27.51	58	1.44
485a)	6.02	34.280	0.41	-	-	106	1500	2.75	34.57	1.31	27.59	51	1.63
597	4.98	34.276	0.41	-	-	95	2000	2.06	34.63	1.98	27.69	41	1.91
711	4.56	34.374	0.40	-	-	83	2500	1.76	34.65	2.38	27.73	37	2.15
826	4.24	34.425	0.46	-	-	76	3000	1.60	34.67	2.73	27.76	35	2.38
982	3.78	34.508	0.64	-	-	65							
1176	3.30	34.521	0.89	-	-	60							
1374	2.95	34.557	1.11	-	-	54							
1574	2.64	34.575	1.34	-	-	50							
1775	2.31	34.602	1.61	-	-	45							
1983	2.08	34.624	1.97	-	-	42							
2195	1.91	34.637	2.10	-	-	39							
2412	1.80	34.649	2.27	-	-	38							
2637	1.70	34.660	2.55	-	-	36							
2875	1.64	34.671	2.67	-	-	35							
3123	1.56	34.678	2.92	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO

CCOFI
6304

80.120

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; April 16, 1963; 1400, 0954 GCT; 32°10'N, 125°16.5'W; sounding, 2386 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 28°, 48°.

2	15.62	33.337	5.65	0.42	2	337	0	(15.62)	(33.34)	(5.65)	(24.58)	(337)	(0.00)
11	15.64	33.337	5.69	0.44	2	338	10	15.64	33.34	5.68	24.57	337	0.03
46	15.7	33.335	5.76	0.44	2	339	20	15.7	33.34	5.71	24.56	339	0.07
77	15.35	33.385	5.71	0.41	2	328	30	15.7	33.34	5.73	24.56	339	0.10
96	14.06	33.136	5.98	0.51	2	320	50	15.7	33.34	5.76	24.56	339	0.17
109	13.34	33.385	5.71	-	-	288	75	15.4	33.38	5.71	24.66	329	0.25
128	12.44	33.463	5.41	-	-	265	100	13.80	33.20	5.93	24.86	310	0.33
146	11.26	33.468	5.03	-	-	244	125	12.59	33.46	5.47	25.30	268	0.41
165	10.40	33.549	4.95	-	-	223	150	11.07	33.48	5.00	25.60	240	0.47
193	9.45	33.721	4.19	-	-	195	200	9.26	33.78	3.98	26.14	188	0.58
220	8.86	33.917	3.75	-	-	172	250	8.52	33.97	3.78	26.41	163	0.67
243	8.54	33.977	3.61	-	-	163	300	7.52	34.01	2.79	26.59	146	0.75
275	7.88	34.004	2.96	-	-	151	400	6.75	34.13	1.30	26.79	127	0.89
316	7.30	34.044	2.37	-	-	140	500	5.99	34.20	0.67	26.94	112	1.02
367	6.88	34.097	1.60	-	-	131	600	5.53	34.30	0.47	27.08	99	1.13
447	6.48	34.204	0.74	-	-	118	700	4.97	34.34	0.46	27.18	90	1.23
534	5.78	34.239	0.47	-	-	107	800	4.60	34.38	0.48	27.25	83	1.32
606	5.47	34.308	0.32	-	-	98	1000	3.95	34.47	0.75	27.39	70	1.49
							1200	3.39	34.52	1.03	27.49	60	1.64
255a)	8.56	33.959	4.01	-	-	164	1500	2.69	34.57	1.33	27.59	51	1.84
359	7.12	34.079	1.89	-	-	135	2000	2.12	34.62	1.90	27.68	42	2.11
434	6.50	34.141	1.26	-	-	123							
505	5.88	34.195	0.79	-	-	111							
600	5.58	34.300	0.54	-	-	100							
720	4.85	34.353	0.46	-	-	88							
837	4.48	34.401	0.48	-	-	80							
956	4.09	34.455	0.69	-	-	72							
1078	3.72	34.489	0.84	-	-	66							
1207	3.37	34.517	1.03	-	-	61							
1332	3.02	34.536	1.14	-	-	56							
1463	2.76	34.558	1.27	-	-	52							
1589	2.56	34.580	1.46	-	-	49							
1731	2.38	34.594	1.65	-	-	46							
1865	2.22	34.617	1.81	-	-	43							
2017	2.10	34.624	1.92	-	-	42							
2161	1.97	34.634	2.19	-	-	40							
2317	1.86	34.645	2.36	-	-	38							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; April 28, 1963; 0504, 0218 GCT; 29°32'N, 130°32'W; sounding, 2626 fm; wind, 080°, force 3; weather, partly cloudy; sea, moderate; wire angle, 10°, 16°.

80.200

1	17.52	34.287	5.49	0.10	2	310	0	(17.52)	(34.29)	(5.49)	(24.86)	(310)	(0.00)
11	17.56	34.292	5.58	0.16	2	310	10	17.55	34.29	5.54	24.86	310	0.03
46	17.9	34.426	5.48	0.15	2	308	20	17.6	34.30	5.57	24.85	311	0.06
75	18.34	34.689	5.41	0.15	2	300	30	17.7	34.34	5.53	24.86	310	0.09
95	18.39	34.736	5.37	0.16	2	297	50	17.9	34.44	5.47	24.89	307	0.16
109	18.25	34.730	5.38	-	-	295	75	18.34	34.69	5.41	24.97	300	0.23
124	17.42	34.619	5.35	-	-	283	100	18.37	34.74	5.37	25.00	297	0.31
144	15.20	34.184	5.37	-	-	266	125	17.34	34.60	5.35	25.15	283	0.38
164	13.89	34.044	5.26	-	-	250	150	14.80	34.14	5.35	25.37	261	0.45
194	11.52	33.803	5.06	-	-	223	200	11.28	33.80	5.02	25.81	220	0.57
219	10.68	33.832	4.87	-	-	207	250	9.75	33.91	4.69	26.16	186	0.68
244	9.90	33.897	4.73	-	-	189	300	8.66	34.00	4.15	26.41	163	0.77
278	9.06	33.979	4.41	-	-	170	400	6.78	34.00	2.68	26.68	137	0.92
318	8.34	34.001	3.94	-	-	158	500	5.74	34.10	1.32	26.90	117	1.05
368	7.34	33.992	3.25	-	-	145	600	5.12	34.20	0.60	27.05	102	1.17
438	6.26	34.020	2.05	-	-	129	700	4.69	34.31	0.49	27.19	89	1.27
523	5.62	34.113	1.09	-	-	114	800	4.32	34.38	0.48	27.28	80	1.36
608	5.08	34.209	0.58	-	-	101	1000	3.79	34.47	0.84	27.41	68	1.53
							1200	3.32	34.52	1.05	27.49	60	1.67
494a)	5.75	34.088	1.49	-	-	118	1500	2.81	34.57	1.40	27.58	52	1.87
792	4.36	34.374	0.47	-	-	81	2000	2.16	34.62	1.90	27.68	43	2.15
991	3.82	34.468	0.83	-	-	68	2500	1.80	34.65	2.38	27.73	38	2.40
1241	3.24	34.528	1.10	-	-	59	3000	1.58	34.67	2.84	27.76	35	2.63
1490	2.82	34.566	1.39	-	-	52	4000	1.50	34.68	3.36	27.77	33	3.08
1739	2.46	34.604	1.62	-	-	46							
1989	2.17	34.617	1.88	-	-	43							
2238	1.92	34.643	2.10	-	-	39							
2488	1.80	34.650	2.34	-	-	38							
2736	1.69	34.662	2.63	-	-	36							
2982	1.58	34.671	2.82	-	-	34							
3230	1.52	34.680	3.03	-	-	33							
3478	1.50	34.680	3.16	-	-	33							
3722	1.50	34.687	3.34	-	-	33							
3967	1.50	34.700	3.36	-	-	32							
4214	1.52	34.685	3.36	-	-	33							
4457	1.55	34.693	3.43	-	-	33							
4699	1.58b)	34.682	3.16	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Alternate value, 1.51°C, not used in interpolation.

SIO

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6304

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

90.28 ALEXANDER AGASSIZ; May 2, 1963; 2114 GCT; 33°28.5'N, 117°46.5'W; sounding, 200 fm; wind, 210°, force 3; weather, clear; sea, slight; wire angle, 15°.

2	15.99	33.683	6.30	0.14	3	320	0	(15.99)	(33.68)	(6.30)	(24.76)	(320)	(0.00)
12	14.55	33.681	7.22	0.14	3	290	10	15.00	33.68	7.09	24.97	299	0.03
32	11.2	33.710	4.12	0.09	13	225	20	13.6	33.72	6.95	25.30	268	0.06
50	10.28	33.754	3.25	-	-	206	30	11.3	33.71	4.34	25.74	226	0.08
72	9.54	33.904	2.98	-	-	183	50	10.24	33.75	3.25	25.96	206	0.13
97	9.48	33.966	2.46	-	-	178	75	9.52	33.92	2.90	26.21	182	0.18
121	9.15	34.019	2.53	-	-	169	100	9.44	33.98	2.46	26.27	176	0.22
160	9.01	34.134	2.04	-	-	158	125	9.12	34.03	2.53	26.36	167	0.26
200	8.98	34.229	1.41	-	-	150	150	9.02	34.10	2.24	26.43	161	0.31
249	8.76	34.262	1.24	-	-	145	200	8.98	34.23	1.41	26.54	150	0.39
298	8.58	34.296	0.99	-	-	140	250	8.75	34.26	1.23	26.60	145	0.46
							300	(8.57)	(34.30)	(0.97)	(26.66)	(139)	(0.54)

90.32 ALEXANDER AGASSIZ; May 2, 1963; 1841 GCT; 33°20.5'N, 118°03.5'W; sounding, 385 fm; wind, 030°, force 1; weather, cloudy; sea, slight; wire angle, 06°.

1	16.62	33.693	6.06	0.17	3	333	0	(16.62)	(33.69)	(6.06)	(24.62)	(333)	(0.00)
11	15.96	33.687	6.08	0.22	3	319	10	16.00	33.69	6.07	24.76	319	0.03
36	12.4	33.588	4.97	0.12	8	255	20	14.9	33.66	5.87	24.98	298	0.06
46	11.93	33.605	4.64	0.10	10	245	30	13.2	33.61	5.30	25.30	268	0.09
61	11.05	33.636	4.11	0.06	13	228	50	11.70	33.61	4.53	25.59	241	0.14
76	10.62a)	33.738	3.53	-	-	213	75	10.64	33.73	3.57	25.87	214	0.20
101	9.84	33.836	3.15	-	-	193	100	9.86	33.83	3.18	26.08	194	0.25
120	9.51	33.985	2.68	-	-	177	125	9.42	33.99	2.64	26.28	175	0.30
140	9.17	34.015	2.52	-	-	169	150	9.02	34.03	2.45	26.38	166	0.34
170	8.78	34.064	2.23	-	-	160	200	8.58	34.12	1.94	26.52	153	0.42
200	8.58	34.124	1.94	-	-	152	250	8.12	34.21	1.30	26.66	139	0.50
240	8.22	34.189	1.45	-	-	142	300	7.72	34.25	1.02	26.75	131	0.57
269	7.98	34.226	1.22	-	-	136	400	7.13	34.30	0.69	26.87	119	0.70
319	7.60	34.269	0.93	-	-	128	500	6.33	34.33	0.55	27.00	106	0.82
383	7.25	34.299	0.73	-	-	121	600	5.70	34.36	0.42	27.11	97	0.93
482	6.48	34.322	0.60	-	-	109							
572	5.87	34.350	0.45	-	-	99							
647	5.46	34.376	0.41	-	-	93							

90.37 ALEXANDER AGASSIZ; May 2, 1963; 1550 GCT; 33°11'N, 118°22.5'W; sounding, 640 fm; wind, 090°, force 2; weather, overcast; sea, very rough; wire angle, 03°.

1	15.22	33.696	6.27	0.19	2	302	0	(15.22)	(33.70)	(6.27)	(24.94)	(302)	(0.00)
11	15.06	33.697	6.21	0.17	2	299	10	15.08	33.70	6.21	24.97	299	0.03
31	13.5	33.664	5.88	0.08	5	270	20	14.2	33.66	6.06	25.13	284	0.06
41	11.99	33.667	4.82	0.06	9	242	30	13.6	33.67	5.91	25.26	272	0.09
51	10.98	33.683	4.35	0.05	13	223	50	11.06	33.68	4.41	25.76	225	0.14
66	10.35	33.743	3.62	-	-	208	75	10.00	33.79	3.37	26.03	199	0.19
81	9.80	33.825	3.22	-	-	193	100	9.39	33.92	2.80	26.23	180	0.24
101	9.37	33.930	2.79	-	-	179	125	8.98	34.04	2.36	26.39	164	0.28
126	8.96	34.036	2.36	-	-	164	150	8.66	34.08	2.26	26.47	157	0.32
146	8.69	34.077	2.30	-	-	157	200	8.35	34.17	1.67	26.59	146	0.40
177	8.52	34.133	1.86	-	-	151	250	7.99	34.21	1.25	26.68	137	0.47
207	8.30	34.180	1.62	-	-	144	300	7.65	34.25	0.97	26.76	130	0.54
236	8.10	34.200	1.38	-	-	140	400	6.89	34.29	0.67	26.90	117	0.67
276	7.82	34.231	1.10	-	-	133	500	6.14	34.32	0.42	27.02	105	0.79
337	7.37	34.267	0.81	-	-	125							
412	6.80	34.299	0.63	-	-	115							
485	6.25	34.319	0.43	-	-	106							
567	5.80	34.350	0.40	-	-	99							

a) Alternate value, 10.39°C, not used in interpolation.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 2, 1963; 1139 GCT; 32°54.5'N, 118°55.5'W; sounding, 900 fm; wind, 350°, force 2; weather, missing; sea, rough; wire angle, 03°. 90.45

2	15.06	33.721	5.99	0.28	4	297	0	(15.06)	(33.72)	(5.99)	(24.99)	(297)	(0.00)
12	15.08	33.714	6.03	0.27	3	298	10	15.08	33.71	6.00	24.98	299	0.03
32	14.6	33.701	5.86	0.22	4	289	20	15.0	33.71	6.03	25.00	297	0.06
42	11.10	33.720	3.83	0.14	16	222	30	14.9	33.71	6.00	25.02	295	0.09
57	10.16	33.787	3.46	0.09	21	202	50	10.45	33.75	3.62	25.92	209	0.14
72	9.76	33.859	3.06	-	-	190	75	9.71	33.87	3.02	26.14	188	0.19
96	9.43	33.948	2.80	-	-	178	100	9.39	33.97	2.68	26.27	176	0.24
116	9.18	34.024	2.36	-	-	169	125	9.07	34.05	2.26	26.38	165	0.28
135	8.93	34.086	2.14	-	-	160	150	8.69	34.12	2.00	26.50	154	0.32
155	8.62	34.137	1.97	-	-	152	200	8.21	34.19	1.53	26.63	142	0.40
185	8.34	34.173	1.66	-	-	145	250	7.76	34.23	1.14	26.73	133	0.47
221	8.02	34.215	1.35	-	-	137	300	7.39	34.25	0.94	26.79	126	0.53
250	7.76	34.229	1.14	-	-	133	400	6.76	34.31	0.74	26.93	113	0.66
299	7.41	34.254	0.96	-	-	126	500	6.16	34.34	0.48	27.03	104	0.77
353	7.04	34.285	0.77	-	-	119	600	5.59	34.37	0.41	27.13	95	0.88
437	6.54	34.318	0.70	-	-	110							
523	6.02	34.345	0.43	-	-	102							
607	5.56	34.378	0.40	-	-	94							

ALEXANDER AGASSIZ; May 2, 1963; 0602 GCT; 32°39'N, 119°28.5'W; sounding, 700 fm; wind, 310°, force 5; weather, clear; sea, very rough; wire angle, 38°. 90.53

2	12.96	33.496	5.84	0.20	7	272	0	(12.96)	(33.50)	(5.84)	(25.26)	(272)	(0.00)
11	12.97	33.494	5.84	0.19	5	273	10	12.97	33.49	5.84	25.25	273	0.03
30	12.8	33.516	5.80	0.08	5	268	20	12.9	33.50	5.83	25.27	271	0.05
54	11.77	33.562	4.89	0.07	9	246	30	12.8	33.52	5.80	25.31	267	0.08
73	11.04	33.610	4.41	0.12	13	229	50	12.0	33.55	5.07	25.48	251	0.13
86	10.68	33.666	4.07	-	-	219	75	10.98	33.62	4.34	25.73	228	0.19
98	10.18	33.741	3.67	-	-	205	100	10.08	33.76	3.57	25.99	202	0.25
121	9.48	33.861	3.15	-	-	185	125	9.42	33.88	3.12	26.19	183	0.30
138	9.24	33.912	3.06	-	-	178	150	9.07	33.94	2.98	26.30	173	0.34
158	8.97	33.963	2.89	-	-	170	200	8.44	34.06	2.46	26.49	155	0.43
185	8.63	34.039	2.53	-	-	159	250	7.97	34.15	1.93	26.63	142	0.50
229	8.15	34.098	2.35	-	-	148	300	7.73	34.24	1.27	26.74	132	0.57
272	7.84	34.195	1.60	-	-	136	400	6.95	34.30	0.67	26.90	117	0.70
333	7.56	34.277	0.95	-	-	126	500	6.31	34.33	0.52	27.01	106	0.82
423	6.78	34.309	0.62	-	-	114	600	5.75	34.36	0.50	27.10	97	0.93
505	6.29	34.331	0.51	-	-	106	700	5.19	34.39	0.48	27.19	89	1.03
639	5.54	34.367	0.50	-	-	94	800	4.68	34.43	0.49	27.28	80	1.12
776	4.79	34.422	0.48	-	-	82	1000	4.02	34.48		27.39	69	1.29
962	4.12	34.479	0.70	-	-	71							
1038	3.96	34.488		-	-	68							

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

90.60 ALEXANDER AGASSIZ; May 2, 1963; 0122 GCT; 32°25'N, 119°59'W; sounding, 520 fm; wind, 320°, force 4; weather, cloudy; sea, very high; wire angle, 40°.[a]

3	15.18	33.583	5.91	0.30	2	310	0	(15.18)	(33.58)	(5.91)	(24.86)	(310)	(0.00)
11	15.18	33.583	5.93	0.29	2	310	10	15.18	33.58	5.92	24.86	310	0.03
32	15.2	33.574	5.93	0.31	2	311	20	15.2	33.58	5.93	24.85	311	0.06
41	14.13	33.456	5.90	0.23	3	298	30	15.2	33.58	5.93	24.85	311	0.09
54	12.52	33.334	5.67	-	-	276	50	12.85	33.35	5.73	25.17	281	0.15
67	11.80	33.336	5.31	-	-	263	75	11.29	33.43	4.84	25.52	247	0.22
88	10.58	33.608	4.23	-	-	222	100	10.20	33.64	4.07	25.88	213	0.28
105	10.01	33.655	4.00	-	-	209	125	9.32	33.83	3.26	26.17	185	0.33
122	9.37	33.807	3.34	-	-	188	150	9.13	33.94	2.86	26.29	174	0.37
147	9.16	33.928	2.93	-	-	176	200	8.36	34.07	2.26	26.51	153	0.46
170	8.95	33.990	2.62	-	-	168	250	7.91	34.14	1.66	26.63	141	0.53
202	8.32	34.076	2.24	-	-	152	300	7.57	34.16	1.45	26.70	135	0.60
227	8.12	34.131	1.75	-	-	145	400	7.20	34.28	0.76	26.85	121	0.74
268	7.74	34.144	1.61	-	-	139	500	6.10	34.33	0.47	27.03	104	0.86
322	7.48	34.180	1.27	-	-	133	600	5.18	34.39	0.45	27.19	88	0.96
406	7.16	34.287	0.73	-	-	120	700	4.84	34.42	0.51	27.26	82	1.05
489	6.23	34.325	0.49	-	-	106	800	4.52	34.44	0.54	27.31	78	1.14
589	5.22	34.387	0.42	-	-	89							
696	4.84	34.423	0.51	-	-	82							
845	4.35	34.450	0.55	-	-	75							

90.70 ALEXANDER AGASSIZ; May 1, 1963; 1835 GCT; 32°12'N, 120°41.5'W; sounding, 2000 fm; wind, 340°, force 6; weather, overcast; sea, high; wire angle, 38°.[b]

3	13.46	33.284	6.21	0.04	1	297	0	(13.46)	(33.28)	(6.21)	(24.99)	(298)	(0.00)
11	13.5	33.286	6.21	0.00	0	298	10	13.5	33.29	6.21	24.99	298	0.03
32	13.41	33.300	6.02	-	-	295	20	13.5	33.29	6.15	24.99	298	0.06
40	13.05	33.325	5.95	-	-	286	30	13.4	33.30	6.08	25.02	295	0.09
53	12.01	33.336	5.55	-	-	267	50	12.50	33.33	5.74	25.22	276	0.15
65	10.70	33.369	5.14	-	-	241	75	10.50	33.45	4.88	25.68	232	0.21
86	10.34	33.540	4.58	-	-	223	100	10.15	33.66	4.15	25.90	211	0.27
103	10.10	33.681	4.03	-	-	209	125	9.67	33.81	3.53	26.10	192	0.32
119	9.78	33.787	3.60	-	-	196	150	9.27	33.88	3.34	26.22	181	0.36
144	9.32	33.863	3.36	-	-	183	200	8.71	34.02	2.74	26.42	162	0.45
168	9.16	33.908	3.25	-	-	177	250	8.00	34.03	2.82	26.53	151	0.53
200	8.71	34.024	2.74	-	-	162	300	7.46	34.06	2.40	26.64	141	0.61
265	7.80	34.039	2.83	-	-	147	400	6.43	34.15	1.26	26.85	121	0.74
319	7.29	34.077	2.10	-	-	138	500	5.96	34.26	0.68	26.99	107	0.86
404	6.40	34.157	1.23	-	-	120							
485	6.02	34.244	0.76	-	-	109							
555	5.80	34.311	0.53	-	-	101							

90.80 ALEXANDER AGASSIZ; May 1, 1963; 1249 GCT; 31°47'N, 121°21'W; sounding, 2100 fm; wind, 320°, force 6; weather, cloudy; sea, high; wire angle, 40°.

2	14.86	33.534	5.93	0.21	2	307	0	(14.86)	(33.53)	(5.93)	(24.89)	(307)	(0.00)
10	14.85	33.531	5.94	0.16	2	307	10	14.85	33.53	5.94	24.89	307	0.03
30	14.9	33.530	5.99	0.15	2	308	20	14.9	33.53	5.95	24.88	308	0.06
52	13.96	33.524	5.69	0.16	2	289	30	14.9	33.53	5.99	24.88	308	0.09
60	12.88	33.547	5.31	0.08	6	267	50	14.4	33.52	5.83	24.98	299	0.15
76	11.72	33.606	4.40	-	-	242	75	11.78	33.60	4.43	25.56	243	0.22
89	11.32	33.677	3.85	-	-	229	100	10.64	33.88	2.48	25.99	203	0.28
100	10.64	33.880	2.48	-	-	203	125	10.42	34.04	1.63	26.15	187	0.33
124	10.42	34.037	1.64	-	-	187	150	10.30	34.10	1.46	26.22	181	0.37
139	10.35	34.077	1.51	-	-	183	200	10.16	34.21	1.17	26.33	170	0.46
163	10.25	34.126	1.40	-	-	178	250	10.02	34.26	1.17	26.39	164	0.55
190	10.18	34.192	1.26	-	-	172	300	9.75	34.31	1.06	26.48	156	0.63
213	10.12	34.215	1.15	-	-	169	400	7.98	34.26	1.03	26.72	134	0.78
252	10.01	34.264	1.18	-	-	164	500	6.83	34.30	0.74	26.91	115	0.92
303	9.71	34.312	1.07	-	-	156							
383	8.20	34.259	1.03	-	-	137							
456	7.32	34.280	1.02	-	-	123							
519	6.63	34.311	0.60	-	-	112							

a) An assumed wire angle of 30° was used in depth determination for this station.
b) An assumed wire angle of 29° was used in depth determination for this station.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; May 1, 1963; 0642 GCT; 31°24'N, 122°00.5'W; sounding, 2000+ fm; wind, 350°, force 5; weather, partly cloudy; sea, very rough; wire angle, 30°.													90.90
3	15.23	33.469	6.03	0.06	2	319	0	(15.23)	(33.47)	(6.03)	(24.76)	(319)	(0.00)
11	15.22	33.474	6.20	0.09	3	319	10	15.22	33.47	6.18	24.77	319	0.03
33	15.3	33.471	6.15	0.09	2	321	20	15.2	33.47	6.18	24.77	319	0.06
59	14.25	33.456	5.86	0.12	3	300	30	15.3	33.47	6.16	24.75	321	0.10
67	13.29	33.440	6.28	0.11	5	283	50	14.7	33.47	5.96	24.88	308	0.16
84	12.42	33.465	5.56	-	-	264	75	12.90	33.45	5.92	25.23	274	0.23
97	11.48	33.478	5.38	-	-	247	100	11.30	33.48	5.28	25.56	243	0.30
110	10.74	33.525	4.81	-	-	231	125	10.00	33.63	4.40	25.90	211	0.35
136	9.67	33.706	4.18	-	-	200	150	9.37	33.79	3.82	26.13	189	0.41
154	9.28	33.812	3.73	-	-	186	200	8.39	34.02	3.30	26.47	157	0.49
180	8.64	33.963	3.32	-	-	165	250	7.44	34.03	3.38	26.61	143	0.57
211	8.22	34.024	3.30	-	-	154	300	7.04	34.06	2.46	26.69	136	0.64
236	7.59	34.016	3.68	-	-	146	400	6.25	34.15	1.34	26.87	119	0.77
281	7.19	34.050	2.58	-	-	138	500	5.67	34.21	0.75	26.99	107	0.89
339	6.74	34.095	2.10	-	-	129	600	(5.19)	(34.30)		(27.12)	(95)	(1.00)
431	6.02	34.179	1.04	-	-	114							
515	5.58	34.220	0.70	-	-	106							
586	5.25	34.283	0.69	-	-	97							
ALEXANDER AGASSIZ; May 1, 1963; 0128 GCT; 31°03'N, 122°37'W; sounding, 2160 fm; wind, 360°, force 5; weather, cloudy; sea, very rough; wire angle, 33°.													90.100
2	16.30	33.506	5.87	0.27	1	339	0	(16.30)	(33.51)	(5.87)	(24.55)	(339)	(0.00)
10	16.30	33.507	5.90	0.31	1	339	10	16.30	33.51	5.90	24.55	339	0.03
44	16.4	33.507	5.97	0.24	2	341	20	16.3	33.51	5.92	24.55	339	0.07
74	16.25	33.552	5.81	0.17	1	335	30	16.3	33.51	5.94	24.55	339	0.10
90	16.36	33.743	5.83	0.01u	2	323	50	16.4	33.52	5.92	24.54	341	0.17
102	15.86	33.756	5.76	-	-	312	75	16.24	33.56	5.81	24.61	334	0.25
119	13.96	33.553	5.89	-	-	287	100	16.05	33.75	5.78	24.80	316	0.34
134	12.34	33.518	5.42	-	-	259	125	13.29	33.53	5.74	25.22	276	0.41
152	11.40	33.514	-	-	-	243	150	11.50	33.51	5.24	25.55	245	0.48
175	10.52	33.572	4.94	-	-	223	200	9.40	33.77	4.02	26.11	191	0.59
196	9.47	33.750	4.05	-	-	193	250	8.61	33.96	3.44	26.39	165	0.68
214	9.16	33.843	3.92	-	-	182	300	7.70	34.00	3.37	26.55	149	0.76
239	8.76	33.941	3.42	-	-	169	400	6.42	34.08	1.72	26.79	126	0.90
279	8.18	33.995	3.48	-	-	156	500	5.66	34.18	0.85	26.97	110	1.03
315	7.38	34.001	3.19	-	-	145							
384	6.60	34.067	1.92	-	-	129							
462	5.83	34.131	1.10	-	-	115							
529	5.55	34.214	0.68	-	-	106							
ALEXANDER AGASSIZ; April 30, 1963; 1453 GCT; 30°25'N, 123°59.5'W; sounding, 2290 fm; wind, 360°, force 4; weather, partly cloudy; sea, very rough; wire angle, 20°.													90.120
2	16.99	33.775	5.54	0.10	5	335	0	(16.99)	(33.78)	(5.54)	(24.60)	(335)	(0.00)
11	17.00	33.774	5.54	0.13	5	335	10	17.00	33.78	5.54	24.60	335	0.03
49	17.0	33.783a)	5.59	0.12	5	335	20	17.0	33.78	5.55	24.60	335	0.07
82	17.21	33.919	5.46	0.14	6	329	30	17.0	33.78	5.57	24.60	335	0.10
101	17.40	34.114	6.27u	0.15	5	320	50	17.0	33.78	5.58	24.60	335	0.17
115	17.33	34.161	5.43	0.16	1	315	75	17.1	33.84	5.52	24.62	333	0.25
133	15.23	33.859	5.50	0.18	2	291	100	17.40	34.11	5.45	24.76	320	0.33
153	14.87	34.011	5.29	0.20	5	272	125	16.40	33.98	5.44	24.89	307	0.41
171	13.92	33.944	5.21	-	-	258	150	14.95	33.99	5.33	25.22	275	0.49
199	12.14	33.801	5.09	-	-	235	200	12.07	33.80	5.08	25.66	233	0.62
227	10.76	33.725	4.77	-	-	216	250	9.64	33.83	4.45	26.12	190	0.72
250	9.64	33.828	4.45	-	-	190	300	8.25	33.99	3.40	26.46	157	0.81
283	8.58	33.959	3.68	-	-	165	400	6.89	34.07	1.92	26.72	133	0.97
325	7.87	34.017	3.00	-	-	150	500	5.99	34.18	1.00	26.93	114	1.09
376	7.14	34.051	2.17	-	-	138	600	5.32	34.27	0.60	27.08	99	1.21
457	6.38	34.121	1.33	-	-	123							
544	5.61	34.224	0.74	-	-	106							
618	5.28	34.282a)	0.57	-	-	98							

a) Salinity samples from 49 to 618 meters did not receive standard handling; they are assumed to be in correct order.

SIO

CCOFI
6304

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

90.140 ALEXANDER AGASSIZ; April 30, 1963; 0602, 0140 GCT; 29°45'N, 125°19.5'W; sounding, 2374 fm; wind, 360°, force 4; weather, partly cloudy; sea, slight; wire angle, 23°, 27°.

2	16.69	33.667	5.82	0.28	1	336	0	(16.69)	(33.67)	(5.82)	(24.59)	(336)	(0.00)
11	16.71	33.665	5.85	0.24	1	337	10	16.70	33.67	5.85	24.58	336	0.03
43	17.3	33.912	5.89	0.22	1	332	20	16.80	33.71	5.87	24.59	336	0.07
71	16.94	33.924	5.66	0.24	2	323	30	17.00	33.79	5.88	24.61	334	0.10
89	16.24	33.818	5.71	0.27	2	315	50	17.40	33.94	5.88	24.63	332	0.17
103	16.33	33.986	5.65	-	-	305	75	16.80	33.92	5.67	24.75	320	0.25
117	15.84	34.053	-	-	-	289	100	16.50	34.02	5.66	24.90	306	0.33
135	15.04	34.050	5.42	-	-	273	125	15.70	34.07	5.54	25.12	285	0.40
155	14.04	33.950	5.31	-	-	260	150	14.28	33.97	5.34	25.35	263	0.47
183	11.84	33.779	5.18	-	-	231	200	10.58	33.75	4.92	25.90	211	0.59
206	10.26	33.747	4.82	-	-	206	250	8.73	33.94	4.10	26.35	168	0.69
228	9.46	33.850	4.48	-	-	186	300	7.88	34.00	3.20	26.53	151	0.77
261	8.46	33.960	3.90	-	-	163	400	6.45	34.06	1.90	26.77	128	0.92
297	7.92	34.001	3.27	-	-	152	500	5.70	34.18	0.92	26.96	110	1.04
410	6.36	34.063	1.79	-	-	127	600	5.20	34.26	0.47	27.09	98	1.15
491	5.74	34.164	0.99	-	-	112	700	4.77	34.34	0.47	27.20	88	1.25
							800	4.40	34.41	0.54	27.30	79	1.34
512a)	5.66	34.189	-	-	-	109	1000	3.86	34.47	0.76	27.40	69	1.51
606	5.17	34.266	0.46	-	-	98	1200	3.37	34.52	1.00	27.49	60	1.66
701	4.76	34.344	0.47	-	-	87	1500	2.73	34.58	1.31	27.60	50	1.85
894	4.14	34.445	0.63	-	-	73	2000	2.11	34.61	1.98	27.67	43	2.13
1086	3.63	34.490	0.85	-	-	65	2500	1.77	34.65	2.50	27.73	37	2.37
1324	3.10	34.544	1.12	-	-	56	3000	1.59	34.67	2.90	27.76	35	2.60
1564	2.63	34.582	1.38	-	-	49	4000	1.51	34.68	3.30	27.77	33	3.05
1805	2.28	34.604	1.77	-	-	45							
2043	2.08	34.611	2.01	-	-	43							
2286	1.90	34.644	2.34	-	-	39							
2531	1.76	34.654	2.54	-	-	37							
2773	1.64	34.664	2.73	-	-	35							
3018	1.58	-	-	-	-								
3265	1.54	34.671	3.07	-	-	34							
3514	1.52	34.682	3.12	-	-	33							
3770	1.50	34.682	3.20	-	-	33							
4021	1.51	34.683	3.35	-	-	33							
4272	1.53	34.682	3.37	-	-	33							

90.160 ALEXANDER AGASSIZ; April 29, 1963; 1555 GCT; 29°04.5'N, 126°40'W; sounding, 2250 fm; wind, 360°, force 2; weather, cloudy; sea, slight; wire angle, 03°.

1	17.56	34.073	5.46	0.15		326	0	(17.56)	(34.07)	(5.46)	(24.69)	(326)	(0.00)
11	17.61	34.068	5.40	0.12		328	10	17.60	34.07	5.40	24.68	327	0.03
46	17.6	34.068	5.43	0.14		328	20	17.6	34.07	5.41	24.68	327	0.07
76	17.59	34.103	5.36	0.18		325	30	17.6	34.07	5.42	24.68	327	0.10
97	17.74	34.215	5.39	0.17		320	50	17.6	34.07	5.41	24.68	327	0.16
112	17.74	34.304	5.35	0.16		314	75	17.6	34.10	5.36	24.70	325	0.25
127	17.38	34.318	5.33	0.20		304	100	17.74	34.24	5.39	24.77	318	0.33
147	15.78	34.125	5.19	-		283	125	17.48	34.32	5.33	24.90	306	0.41
168	14.66	34.035	5.09	-		266	150	15.60	34.11	5.17	25.17	280	0.48
198	12.20	33.779	4.95	-		237	200	12.10	33.77	4.94	25.64	236	0.61
223	10.38	33.744	4.49	-		208	250	9.56	33.82	4.21	26.13	190	0.72
247	9.62	33.805	4.22	-		192	300	8.21	33.98	3.63	26.46	158	0.81
282	8.62	33.947	4.06	-		166	400	6.93	34.07	1.99	26.72	133	0.96
322	7.82	34.001	3.12	-		151	500	6.06	34.18	1.25	26.92	114	1.09
372	7.25	34.035	2.39	-		140	600	5.46	34.26	0.72	27.06	101	1.21
442	6.46	34.121	1.53	-		124							
528	5.90	34.199	1.13	-		111							
612	5.38	34.262	0.62	-		100							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; April 29, 1963; 0554, 0220 GCT; 28°25'N, 127°58'W; sounding, 2500 fm; wind, 030°, force 3; weather, missing; sea, slight; wire angle, 06°, 07°.													90.180
1	17.69	33.979	5.79	0.04	1	336	0	(17.69)	(33.98)	(5.79)	(24.59)	(336)	(0.00)
11	17.72	33.977	5.88	0.07	2	337	10	17.72	33.98	5.88	24.58	337	0.03
46	17.7	33.967	5.83	0.06	1	337	20	17.7	33.98	5.87	24.58	336	0.07
75	16.57	34.049	5.76	0.08	1	306	30	17.7	33.97	5.85	24.58	337	0.10
95	15.86	34.050	5.87	-	-	290	50	17.7	33.97	5.83	24.58	337	0.17
110	15.26	33.999	5.70	-	-	281	75	16.57	34.05	5.76	24.91	306	0.25
125	14.61	33.986	5.63	-	-	269	100	15.68	34.04	5.83	25.10	287	0.32
145	13.58	33.926	5.33	-	-	253	125	14.61	33.99	5.63	25.30	268	0.39
165	12.53	33.854	5.22	-	-	238	150	13.34	33.91	5.30	25.50	249	0.46
195	10.92	33.770	5.09	-	-	216	200	10.69	33.77	5.03	25.89	212	0.58
220	9.83	33.803	4.71	-	-	195	250	9.11	33.92	4.40	26.28	175	0.68
245	9.22	33.902	4.50	-	-	178	300	8.15	33.98	3.70	26.47	157	0.76
280	8.43	33.963	3.88	-	-	162	400	6.69	34.06	2.05	26.74	131	0.91
320	7.88	33.997	3.54	-	-	152	500	5.85	34.16	1.01	26.93	113	1.04
370	7.02	34.026	2.61	-	-	138	600	5.23	34.25	0.66	27.08	99	1.15
439	6.32	34.108	1.51	-	-	123	700	4.83	34.33	0.54	27.19	89	1.25
525	5.62	34.181	0.93	-	-	109	800	4.52	34.40	0.50	27.28	81	1.35
610	5.19	34.260	0.63	-	-	98	1000	3.88	34.47	0.74	27.40	69	1.51
							1200	3.36	34.52	1.06	27.49	60	1.66
556a)	5.53	34.215	0.72	-	-	105	1500	2.77	34.57	1.34	27.58	51	1.85
857	4.34	34.423	0.50	-	-	77	2000	2.14	34.63	2.00	27.69	42	2.13
1056	3.72	34.492	0.87	-	-	66	2500	1.79	34.65	2.50	27.73	38	2.38
1304	3.15	34.539	1.16	-	-	57	3000	1.57	34.67	2.98	27.76	34	2.61
1554	2.69	34.573	1.39	-	-	50	4000	1.52	34.69	3.38	27.78	33	3.05
1803	2.34	34.606	1.72	-	-	45							
2051	2.10	34.633	2.05	-	-	41							
2299	1.92	34.642	2.30	-	-	39							
2548	1.76	34.655	2.63	-	-	37							
2796	1.64	34.662	2.76	-	-	36							
3042	1.56	34.671	3.00	-	-	34							
3289	1.53	34.680	3.06	-	-	33							
3536	1.50	34.679	3.29	-	-	33							
3783	1.50	34.684	3.31	-	-	33							
4027	1.52	34.688	3.39	-	-	33							
4271	1.54	34.684	3.41	-	-	33							
4516	1.56	34.678	3.13	-	-	34							
ALEXANDER AGASSIZ; April 28, 1963; 1710 GCT; 28°00'N, 129°15.5'W; sounding, 2450 fm; wind, 330°, force 2; weather, overcast; sea, moderate; wire angle, 02°.													90.200
0	17.70	34.130	5.87	0.24	2	325	0	17.70	34.13	5.87	24.70	325	0.00
10	17.70	34.126	5.65	0.18	1	326	10	17.70	34.13	5.65	24.70	325	0.03
45	17.7	34.128	5.66	0.23	2	325	20	17.7	34.13	5.65	24.70	325	0.07
75	17.98	34.466	5.49	0.15	1	307	30	17.7	34.13	5.65	24.70	325	0.10
95	18.09	34.596	5.57	0.17	1	300	50	17.7	34.14	5.64	24.71	325	0.16
110	17.86	34.618	5.53	0.09	1	294	75	17.98	34.47	5.49	24.89	307	0.24
125	17.29	34.568	5.52	-	-	284	100	18.08	34.61	5.56	24.97	299	0.32
145	15.08	34.193	5.40	-	-	263	125	17.29	34.57	5.52	25.13	284	0.39
165	13.84	34.059	5.32	-	-	248	150	14.78	34.16	5.37	25.39	259	0.46
195	11.45	33.832	5.19	-	-	220	200	11.25	33.83	5.17	25.84	217	0.58
220	10.52	33.873	5.06	-	-	201	250	9.52	33.95	4.71	26.23	179	0.68
245	9.66	33.939	4.80	-	-	182	300	8.09	33.99	3.86	26.49	155	0.77
280	8.54	33.983	4.18	-	-	162	400	6.58	34.07	2.10	26.76	129	0.92
320	7.72	34.002	3.54	-	-	149	500	5.59	34.17	1.06	26.97	110	1.04
369	7.00	34.033	2.60	-	-	137	600	5.04	34.27	0.64	27.11	96	1.15
439	6.09	34.108	1.60	-	-	120							
525	5.40	34.187	0.92	-	-	106							
610	5.01	34.285	0.62	-	-	94							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO
CCOFI
6304

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

93.28 BLACK DOUGLAS; April 15, 1963; 1957 GCT; 32°54.5'N, 117°22'W; sounding, 280 fm; wind, 270°, force 2; weather, partly cloudy; sea, very rough; wire angle, 08°.

0	15.18	33.632	5.87		306	0	15.18	33.63	5.87	24.90	306	0.00
10	14.58	33.654	5.98		292	10	14.58	33.65	5.98	25.04	293	0.03
30	11.74	33.623	4.32		241	20	14.29	33.65	5.83	25.10	287	0.06
50	10.80	33.646	3.93		223	30	11.74	33.62	4.32	25.59	241	0.09
74	9.86	33.858	3.18		192	50	10.80	33.65	3.93	25.78	222	0.13
97	9.57	33.981	2.15		178	75	9.84	33.86	3.17	26.11	191	0.18
121	9.22	34.049	2.32		167	100	9.54	33.99	2.47	26.26	177	0.23
160	9.09	34.203	1.52		154	125	9.21	34.07	2.27	26.38	166	0.27
199	8.90	34.239	1.28		149	150	9.12	34.16	1.71	26.46	158	0.31
248	8.75	34.276	1.11		144	200	8.90	34.24	1.27	26.56	148	0.39
296	8.74	34.318	0.90		140	250	8.75	34.28	1.10	26.61	143	0.47
401	7.71	34.321	0.70		125	300	8.73	34.32	0.87	26.65	140	0.54
						400	7.73	34.32	0.71	26.80	126	0.68

93.30 BLACK DOUGLAS; April 15, 1963; 2305 GCT; 32°50.5'N, 117°31'W; sounding, 430 fm; wind, 240°, force 4; weather, cloudy; sea, very rough; wire angle, 22°.

1	15.36	33.657	5.81		308	0	(15.36)	(33.66)	(5.81)	(24.88)	(308)	(0.00)
10	14.91	33.656	5.93		299	10	14.91	33.66	5.93	24.98	299	0.03
29	13.74	33.638	5.68		277	20	14.32	33.66	5.83	25.11	287	0.06
37	12.91	33.623	5.15		262	30	13.70	33.64	5.65	25.22	276	0.09
51	11.28	33.605	4.16		234	50	11.36	33.60	4.19	25.64	236	0.14
65	10.86	33.650	3.96		223	75	10.52	33.70	3.73	25.87	214	0.20
88	10.04	33.782	3.34		200	100	9.69	33.86	2.94	26.13	189	0.25
105	9.62	33.920	2.77		183	125	9.46	33.97	2.60	26.26	177	0.29
122	9.48	33.957	2.64		178	150	9.29	34.08	2.00	26.37	166	0.34
140	9.36	34.029	2.36		171	200	8.91	34.24	1.39	26.56	149	0.42
165	9.18	34.149	1.64		159	250	8.09	34.18	1.52	26.64	141	0.49
196	8.93	34.234	1.42		149	300	7.88	34.24	1.03	26.72	134	0.56
221	8.85	34.247	1.27		147	400	7.43	34.33	0.51	26.85	121	0.70
265	7.85	34.170	1.55		138	500	6.63	34.33	0.37	26.96	110	0.82
315	7.90	34.265	0.89		132							
392	7.50	34.332	0.53		122							
472	6.83	34.321	0.40		113							
552	6.30a)	34.346	0.30		105							

93.40 BLACK DOUGLAS; April 16, 1963; 0520 GCT; 32°30'N, 118°11.5'W; sounding, 800 fm; wind, 270°, force 5; weather, squalls; sea, high; wire angle, 30°.

1	14.48	33.675	6.16		289	0	(14.48)	(33.68)	(6.16)	(25.09)	(288)	(0.00)
9	14.68	33.695	6.24		291	10	14.67	33.70	6.23	25.06	291	0.03
27	13.11	33.647	5.73		264	20	13.85	33.67	6.00	25.21	277	0.06
35	12.75	33.640	5.54		258	30	12.98	33.64	5.67	25.36	262	0.08
48	12.18	33.651	5.13		246	50	12.05	33.65	5.03	25.55	244	0.14
60	11.36	33.664	4.52		231	75	10.47	33.72	3.75	25.89	212	0.19
82	10.15	33.748	3.47		204	100	9.74	33.82	3.10	26.10	193	0.24
99	9.76	33.819	3.11		193	125	9.31	33.92	2.81	26.24	178	0.29
116	9.40	33.902	2.88		181	150	9.01	34.02	2.40	26.37	166	0.33
134	9.23	33.933	2.76		176	200	8.49	34.17	1.54	26.57	148	0.41
159	8.86	34.063	2.16		161	250	8.08	34.22	1.10	26.67	138	0.49
190	8.55	34.156	1.66		149	300	7.68	34.26	0.80	26.76	129	0.56
216	8.37	34.183	1.35		145	400	6.84	34.29	0.50	26.90	116	0.68
258	8.00	34.229	1.02		136	500	6.26	34.34	0.32	27.02	105	0.80
305	7.63	34.259	0.76		129							
379	6.98	34.280	0.57		118							
454	6.50	34.324	0.32		109							
532	6.10	34.349	0.32		102							

a) Mean value of 6.26 and 6.33°C.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

BLACK DOUGLAS; April 16, 1963; 2354 GCT; 31°30'N, 120°14'W; sounding, 2200 fm; wind, 260°, force 6; weather, cloudy; sea, rough; wire angle, 13°. 93.70

1	15.24	33.620	5.59			308	0	(15.24)	(33.62)	(5.59)	(24.88)	(308)	(0.00)
11	15.24	33.635	5.73			307	10	15.24	33.63	5.71	24.88	308	0.03
34	14.28	33.583	5.81			291	20	15.14	33.63	5.75	24.91	306	0.06
44	13.84	33.590	5.77			282	30	14.60	33.59	5.80	24.99	297	0.09
58	13.50	33.566	5.63			277	50	13.70	33.58	5.72	25.17	280	0.15
76	12.14	33.537	4.70			254	75	12.23	33.54	4.74	25.43	256	0.22
99	10.71	33.586	4.21			226	100	10.68	33.59	4.18	25.76	225	0.28
118	10.06	33.750	3.43			203	125	9.84	33.79	3.25	26.06	196	0.33
137	9.54	33.861	3.05			186	150	9.32	33.91	2.96	26.23	179	0.38
166	9.07	33.967	2.81			171	200	8.55	34.05	2.35	26.47	157	0.46
193	8.68	34.047	2.41			159	250	8.00	34.15	1.62	26.63	142	0.54
229	8.02	34.080	2.06			147	300	7.84	34.32	1.06	26.78	127	0.61
257	8.00	34.174	1.44			140	400	6.60	34.22	0.70	26.88	118	0.74
303	7.83	34.327	1.02			126	500	5.92	34.28	0.44	27.02	105	0.86
364	6.93	34.212	0.80			123	600	5.47	34.42	0.30	27.18	89	0.96
459	6.14	34.250	0.51			110							
543	5.72	34.321	0.38			100							
616	5.38	34.437	0.28			87							

BLACK DOUGLAS; April 17, 1963; 0549 GCT; 31°10'N, 120°56'W; sounding, 2100 fm; wind, 300°, force 4; weather, missing; sea, rough; wire angle, 15°. 93.80

1	15.34	33.543	5.67			316	0	(15.34)	(33.54)	(5.67)	(24.79)	(316)	(0.00)
10	15.37	33.546	5.65			317	10	15.37	33.55	5.65	24.79	316	0.03
29	14.58	33.550	5.68			300	20	15.19	33.55	5.66	24.83	313	0.06
38	14.28	33.567	5.67			293	30	14.55	33.55	5.68	24.97	299	0.09
53	13.72	33.561	5.52			282	50	13.86	33.56	5.56	25.12	285	0.15
67	12.93	33.560	5.30			267	75	12.50	33.56	5.03	25.40	259	0.22
91	11.68	33.560	4.53			244	100	11.29	33.57	4.29	25.63	237	0.28
110	10.79	33.603	4.06			226	125	10.08	33.79	3.92	26.01	200	0.34
129	10.00	33.812	3.88			197	150	9.63	33.82	3.30	26.11	191	0.39
147	9.70	33.816	3.33			192	200	8.62	34.06	2.40	26.46	158	0.48
175	9.02	33.927	2.94			173	250	7.85	34.09	2.11	26.60	144	0.55
207	8.50	34.080	2.34			154	300	7.29	34.15	1.29	26.73	132	0.63
234	8.02	34.067	2.32			148	400	6.50	34.26	0.53	26.92	114	0.75
279	7.56	34.149	1.47			136	500	5.93	34.33	0.30	27.05	102	0.87
330	6.96	34.170	1.02			126							
408	6.46	34.263	0.49			113							
488	6.00	34.323	0.31			103							
570	5.48	34.357	0.28			94							

ALEXANDER AGASSIZ; April 9, 1963; 2216 GCT; 32°41.5'N, 117°26.5'W; sounding, 200 fm; wind, 280°, force 3; weather, cloudy; sea, moderate; wire angle, 09°.[a] 94.30

2	15.18	33.645	6.07	0.29	4	305
17	14.68	33.629	-	0.31	4	296
31	13.9	33.594	6.11	0.41	3	283
41	12.2	33.612	5.67	0.74	4	250
51	11.16	33.641	4.44	1.04	10	229
61	10.68	33.665	4.18	-	-	219
66	10.54	33.710	4.10	-	-	214
72	10.30	33.687	4.30	-	-	211
76	10.21	33.761	3.79	-	-	204
81	10.08	33.783	3.40	-	-	201
87	9.94	33.852	3.47	-	-	193
91	9.78	33.872	3.29	-	-	189
96	9.70	33.917	3.21	-	-	185
100	9.62	33.919	3.14	-	-	183
105	9.50	33.927	3.12	-	-	181
110	9.34	33.98	2.94	-	-	174
115	9.22	33.98	2.85	-	-	173
121	9.12	34.000	2.81	-	-	170

a) Shakedown station.

SIO

CCOFI
6304

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
100.30	ALEXANDER AGASSIZ; May 5, 1963; 0338 GCT; 31°40.5'N, 116°46.5'W; sounding, 214 fm; wind, 320°, force 4; weather, partly cloudy; sea, moderate; wire angle, 12°.												
1	14.65	33.712	6.60	0.20	6	290	0	(14.65)	(33.71)	(6.60)	(25.07)	(290)	(0.00)
11	13.45	33.692	6.09	0.30	9	267	10	13.75	33.69	6.24	25.25	273	0.03
30	10.6	33.832	3.47	-	-	206	20	10.7	33.77	3.77	25.89	212	0.05
51	10.22	33.910	3.03	-	-	194	30	10.6	33.83	3.47	25.96	206	0.07
74	9.94	33.968	2.73	-	-	185	50	10.2	33.91	3.07	26.09	193	0.11
99	9.82	34.012	2.60	-	-	180	75	9.94	33.97	2.71	26.18	185	0.16
123	9.67	34.070	2.23	-	-	173	100	9.81	34.01	2.58	26.23	180	0.21
163	9.64	34.271	1.38	-	-	158	125	9.66	34.08	2.17	26.31	172	0.25
204	9.42	34.325	1.14	-	-	150	150	9.64	34.22	1.58	26.42	161	0.29
253	8.96	34.375	0.91	-	-	139	200	9.44	34.32	1.15	26.53	151	0.37
303	8.46	34.366	0.78	-	-	133	250	8.99	34.37	0.91	26.65	140	0.45
373	7.96	34.374	0.80	-	-	125	300	8.49	34.37	0.78	26.73	133	0.52
100.35	ALEXANDER AGASSIZ; May 5, 1963; 0703 GCT; 31°30.5'N, 117°07'W; sounding, 662 fm; wind, 330°, force 3; weather, missing; sea, moderate; wire angle, 38°.												
2	15.88	33.662	6.03	0.28	2	319	0	(15.88)	(33.66)	(6.03)	(24.76)	(319)	(0.00)
10	15.90	33.658	5.98	0.30	2	320	10	15.90	33.66	5.98	24.76	319	0.03
26	15.4	33.647	6.14	-	-	310	20	15.6	33.65	6.03	24.82	314	0.06
33	14.89	33.623	5.93	-	-	301	30	15.0	33.63	5.98	24.94	303	0.09
45	14.49	33.632	6.05	-	-	292	50	13.00	33.55	5.38	25.29	269	0.15
56	12.46	33.540	5.10	-	-	260	75	10.73	33.74	3.84	25.86	215	0.21
75	10.73	33.737	3.84	-	-	215	100	10.13	33.89	3.11	26.08	194	0.26
89	10.34	33.832	3.36	-	-	201	125	9.61	33.92	3.12	26.19	183	0.31
103	10.07	33.893	3.10	-	-	192	150	9.30	34.05	2.60	26.35	169	0.36
118	9.72	33.900	3.16	-	-	186	200	8.42	34.12	2.35	26.54	150	0.44
139	9.47	33.995	2.87	-	-	175	250	8.86	34.35	1.05	26.65	140	0.51
162	9.10	34.086	2.38	-	-	163	300	8.31	34.36	0.91	26.75	131	0.58
182	8.76	34.111	2.41	-	-	156	400	7.53	34.38		26.88	118	0.71
215	8.26	34.123	2.22	-	-	148							
251	8.86	34.358	1.04	-	-	139							
312	8.20	34.356	0.88	-	-	130							
379	7.72	34.378	0.65	-	-	121							
455	6.92	34.376	-	-	-	111							

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

10040

ALEXANDER AGASSIZ; May 5, 1963; 1311, 1045 GCT; 31°21.5'N, 117°27'W; sounding, 1080 fm; wind, 320°, force 5; weather, overcast; sea, rough; wire angle, 14°, 30°.

1	15.78	33.568	5.90	0.38	1	324	0	(15.78)	(33.57)	(5.90)	(24.72)	(323)	(0.00)
10	15.74	33.574	5.90	0.36	1	322	10	15.74	33.57	5.90	24.73	323	0.03
35	15.8	33.567	5.90	0.35	3	324	20	15.8	33.57	5.90	24.71	324	0.06
44	15.74	33.573	5.83	0.38	2	322	30	15.8	33.57	5.90	24.71	324	0.10
59	14.00	33.505	5.81	-	-	292	50	15.20	33.54	5.82	24.82	313	0.16
74	13.14	33.506	5.32	-	-	275	75	13.08	33.51	5.30	25.24	273	0.23
98	11.36	33.558	4.67	-	-	239	100	11.21	33.56	4.62	25.64	236	0.30
118	10.08	33.655	4.35	-	-	210	125	9.83	33.71	4.29	25.99	202	0.35
137	9.55	33.772	4.24	-	-	193	150	9.15	33.89	3.70	26.25	178	0.40
167	8.82	33.959	3.20	-	-	168	200	8.51	34.02	3.06	26.45	159	0.49
196	8.57	34.017	3.08	-	-	160	250	7.73	34.03	2.83	26.57	147	0.57
235	7.94	34.027	2.97	-	-	150	300	7.38	34.12	1.65	26.69	136	0.64
264	7.56	34.039	2.59	-	-	144	400	6.65	34.24	1.00	26.89	117	0.77
312	7.42	34.153	1.64	-	-	134	500	6.02	34.30	0.65	27.02	105	0.89
375	6.86	34.218	1.07	-	-	122	600	5.64	34.38	0.52	27.13	94	1.00
471	6.16	34.278	0.77	-	-	108	700	5.14	34.42	0.44	27.22	86	1.09
560	5.78	34.354	0.50	-	-	98	800	4.65	34.45	0.38	27.30	78	1.18
635	5.48	34.393	0.52	-	-	92	1000	3.99	34.50	0.57	27.41	68	1.35
							1200	3.52	34.54	0.79	27.49	60	1.49
136a)	9.44	33.821	4.06	-	-	188	1500	2.91	34.57		27.57	52	1.69
316	7.21	34.145	1.28	-	-	132							
542	5.90	34.339	0.54	-	-	101							
770	4.79	34.441	0.37	-	-	80							
998	4.00	34.501	0.57	-	-	68							
1229	3.45	34.546	0.81	-	-	59							
1460	2.98	34.573	-	-	-	53							
1698	2.64	34.599	1.35	-	-	48							
1946	2.45	34.612	1.57	-	-	45							

100.50

ALEXANDER AGASSIZ; May 5, 1963; 1932 GCT; 30°54'N, 118°08'W; sounding, 750 fm; wind, 350°, force 6; weather, partly cloudy; sea, moderate; wire angle, 33°.

2	16.04	33.474	5.82	0.22	0	336	0	(16.04)	(33.47)	(5.82)	(24.58)	(336)	(0.00)
10	16.05	33.475	5.80	0.18	1	336	10	16.05	33.48	5.80	24.59	336	0.03
31	15.5	33.572	5.89	0.16	0	317	20	16.0	33.49	5.80	24.61	334	0.07
39	15.14	33.540	5.82	-	-	312	30	15.5	33.57	5.89	24.78	318	0.10
51	14.48	33.486	5.79	-	-	303	50	14.57	33.49	5.79	24.92	304	0.16
63	13.94	33.494	5.73	-	-	291	75	13.39	33.49	5.61	25.17	281	0.24
84	12.70	33.487	5.42	-	-	268	100	11.65	33.50	5.10	25.51	248	0.30
102	11.54	33.499	5.03	-	-	246	125	10.62	33.64	4.12	25.80	220	0.36
119	10.85	33.592	4.36	-	-	228	150	9.78	33.80	3.51	26.07	195	0.41
142	10.05	33.747	3.68	-	-	203	200	8.57	33.98	3.50	26.41	163	0.51
165	9.28	33.869	3.40	-	-	182	250	7.93	34.08	2.43	26.58	146	0.58
196	8.63	33.976	3.55	-	-	164	300	7.31	34.10	1.85	26.69	136	0.66
219	8.30	34.004	3.13	-	-	157	400	6.22	34.15	1.20	26.87	119	0.79
257	7.84	34.092	2.31	-	-	144	500	6.02	34.31	0.61	27.03	104	0.91
310	7.18	34.104	1.76	-	-	134							
394	6.24	34.140	1.23	-	-	120							
474	6.16	34.277	0.73	-	-	108							
543	5.74	34.349	0.49	-	-	98							

a) Overlapping casts; reconciliation of property curves when necessary.

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	μg at/L	μg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

100.60

ALEXANDER AGASSIZ; May 6, 1963; 0119 GCT; 30°36'N, 118°48'W; sounding, 1650 fm; wind, 310°, force 5; weather, partly cloudy; sea, rough; wire angle, 40°.

1	15.80	33.594	5.95	0.14	3	322	0	(15.80)	(33.59)	(5.95)	(24.73)	(322)	(0.00)
9	15.80	33.589	5.96	0.19	2	323	10	15.8	33.59	5.97	24.73	322	0.03
29	15.7	33.595	5.99	0.18	2	320	20	15.7	33.59	5.98	24.75	320	0.06
52	15.54	33.592	5.81	0.30	2	317	30	15.7	33.60	5.98	24.76	320	0.10
60	15.26	33.599	5.92	0.33	2	310	50	15.6	33.59	5.83	24.77	318	0.16
76	13.69	33.552	5.60	-	-	282	75	13.78	33.56	5.62	25.14	283	0.24
86	13.12	33.531	5.41	-	-	273	100	11.66	33.55	4.87	25.55	245	0.30
97	11.82	33.539	4.94	-	-	248	125	10.02	33.65	4.24	25.92	210	0.36
118	10.26	33.620	4.36	-	-	216	150	9.29	33.84	3.54	26.18	184	0.41
133	9.78	33.700	4.05	-	-	202	200	8.52	34.03	2.60	26.45	158	0.50
153	9.22	33.849	3.49	-	-	182	250	7.84	34.09	2.14	26.60	144	0.57
176	8.91	33.949	3.10	-	-	170	300	7.02	34.10	1.81	26.73	132	0.65
196	8.58	34.026	2.66	-	-	160	400	6.01	34.14	1.14	26.89	117	0.78
229	8.15	34.073	2.34	-	-	150	500	(5.59)	(34.26)	(0.60)	(27.04)	(103)	(0.89)
274	7.46	34.106	1.91	-	-	138							
348	6.38	34.099	1.61	-	-	124							
422	5.91	34.166	0.99	-	-	114							
487	5.64	34.253	0.62	-	-	104							

100.70

ALEXANDER AGASSIZ; May 6, 1963; 0830 GCT; 30°17.5'N, 119°25'W; sounding, 2080 fm; wind, 340°, force 5; weather, partly cloudy; sea, rough; wire angle, 28°.

1	15.78	33.358	6.04	0.39	2	339	0	(15.78)	(33.36)	(6.04)	(24.56)	(339)	(0.00)
10	15.80	33.351	5.98	0.39	2	340	10	15.80	33.35	5.98	24.55	340	0.03
32	15.8	33.385	5.97	0.37	3	337	20	15.8	33.36	5.97	24.55	339	0.07
58	14.62	33.367	6.04	-	-	314	30	15.8	33.38	5.97	24.57	338	0.10
67	13.72	33.311	6.24	-	-	300	50	15.4	33.37	5.97	24.65	330	0.17
85	13.14	33.396	5.94	-	-	283	75	13.44	33.32	6.17	25.02	294	0.25
98	12.80	33.483	5.69	-	-	270	100	12.64	33.48	5.61	25.31	267	0.32
111	11.77	33.458	5.30	-	-	253	125	11.12	33.55	5.03	25.65	235	0.38
137	10.58	33.658	4.78	-	-	218	150	9.80	33.74	4.10	26.02	199	0.44
154	9.64	33.756	3.99	-	-	196	200	8.88	33.97	3.14	26.35	168	0.53
179	9.29	33.87	3.63	-	-	182	250	7.93	34.04	2.73	26.55	149	0.61
209	8.69	33.992	2.99	-	-	164	300	7.57	34.10	2.10	26.65	140	0.69
234	8.16	34.028	2.81	-	-	153	400	7.08	34.28	0.90	26.86	120	0.82
276	7.70	34.050	2.59	-	-	145	500	6.37	34.33	0.61	27.00	107	0.94
331	7.44	34.189	1.41	-	-	131							
420	6.96	34.300	0.83	-	-	117							
503	6.34	34.330	0.61	-	-	107							
576	5.56	34.311	0.56	-	-	99							

100.80

ALEXANDER AGASSIZ; May 6, 1963; 1706 GCT; 30°02'N, 119°52'W; sounding, 2090 fm; wind, 340°, force 6; weather, cloudy; sea, very rough; wire angle, 34°.

2	16.41	33.476	5.80	0.02	2	344	0	(16.41)	(33.48)	(5.80)	(24.51)	(344)	(0.00)
10	16.40	33.473	5.80	0.04	2	344	10	16.40	33.47	5.80	24.50	344	0.03
43	16.4	33.465	5.83	0.00	2	345	20	16.4	33.47	5.81	24.50	344	0.07
73	16.24	33.521	5.76	0.07	3	337	30	16.4	33.47	5.82	24.50	344	0.10
89	16.20	33.723	5.79	0.04	3	321	50	16.4	33.47	5.83	24.50	344	0.17
101	15.66	33.698	5.80	-	-	312	75	16.23	33.55	5.76	24.60	335	0.26
118	14.40	33.612	5.78	-	-	292	100	15.85	33.71	5.80	24.81	315	0.34
134	13.31	33.600	5.51	-	-	271	125	13.97	33.61	5.69	25.14	283	0.42
151	12.20	33.543	5.27	-	-	255	150	12.30	33.55	5.27	25.43	256	0.48
175	10.38	33.590	4.73	-	-	220	200	9.52	33.79	4.16	26.11	191	0.60
197	9.62	33.758	4.26	-	-	195	250	8.63	33.96	3.77	26.38	165	0.69
217	9.06	33.885	3.88	-	-	177	300	7.57	34.07	2.50	26.63	142	0.77
243	8.76	33.948	3.81	-	-	168	400	6.45	34.12	1.58	26.82	124	0.91
276	7.82	34.025	3.25	-	-	149	500	5.92	34.25	0.68	26.99	107	1.03
317	7.40	34.088	2.11	-	-	138							
383	6.55	34.104	1.74	-	-	126							
457	6.17	34.194	0.91	-	-	115							
522	5.79	34.266	0.64	-	-	105							

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; May 7, 1963; 0321, 0038 GCT; 29°39'N, 120°44'W; sounding, 2180 fm; wind, 310°, force 4; weather, clear; sea, very rough; wire angle, 27°, 30°.													
2	16.65	33.597	5.63	0.38	-	340	0	(16.65)	(33.60)	(5.63)	(24.54)	(340)	(0.00)
11	16.66	33.590	5.64	0.40	2	341	10	16.66	33.59	5.64	24.53	341	0.03
29	16.5	33.589	5.64	0.40	2	338	20	16.6	33.59	5.64	24.55	340	0.07
53	16.36	33.589	5.70	0.38	2	335	30	16.5	33.59	5.64	24.57	338	0.10
62	16.34	33.584	5.64	-	-	335	50	16.4	33.59	5.68	24.59	335	0.17
71	15.75	33.539	5.83	-	-	325	75	15.53	33.52	5.81	24.74	322	0.25
86	15.13	33.507	5.74	-	-	314	100	14.02	33.53	5.61	25.07	290	0.33
99	14.11	33.527	5.62	-	-	292	125	12.43	33.62	4.77	25.46	253	0.40
121	12.62	33.605	4.93	-	-	258	150	11.46	33.70	4.00	25.70	230	0.46
140	11.85	33.669	4.29	-	-	239	200	9.26	33.89	3.45	26.23	180	0.56
163	10.86	33.748	3.68	-	-	216	250	8.71	34.07	2.51	26.46	158	0.65
188	9.47	33.850	3.60	-	-	186	300	7.92	34.07	2.44	26.58	147	0.73
215	9.08	33.952	3.11	-	-	173	400	6.54	34.09	1.60	26.79	127	0.87
250	8.71	34.069	2.51	-	-	158	500	5.90	34.22	0.76	26.97	109	1.00
305	7.83	34.073	2.42	-	-	145	600	5.41	34.32	0.52	27.11	96	1.11
373	6.69	34.079	1.75	-	-	130	700	4.98	34.37	0.50	27.20	88	1.20
536	5.78	34.261	0.53	-	-	105	800	4.62	34.42	0.54	27.28	80	1.30
711	4.92	34.379	0.39	-	-	86	1000	4.00	34.48	0.73	27.39	69	1.46
							1200	3.47	34.53	0.93	27.49	60	1.61
364a)	7.00	34.076	2.03	-	-	134	1500	2.84	34.57	1.35	27.58	52	1.81
454	6.12	34.148	1.04	-	-	117	2000	2.11	34.63	2.15	27.69	41	2.09
587	5.42	34.302	0.62	-	-	98	2500	1.78	34.66	2.58	27.74	37	2.33
810	4.62	34.418	0.67	-	-	80	3000	1.64	34.67	2.88	27.76	35	2.56
1037	3.90	34.491	0.78	-	-	67							
1264	3.32	34.539	1.00	-	-	58							
1491	2.87	34.568	1.34	-	-	52							
1720	2.46	34.597	1.63	-	-	47							
1949	2.16	34.627	2.10	-	-	42							
2179	1.96	34.638	2.41	-	-	40							
2408	1.82	34.657	2.53	-	-	37							
2640	1.74	34.662	2.69	-	-	36							
2872	1.66	34.669	2.87	-	-	35							
3104	1.64	34.673	2.89	-	-	35							
3338	1.60	34.678	2.93	-	-	34							
3574	1.58	34.681	3.10	-	-	34							
3812	1.58	34.687	3.16	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.

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100.100

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 7, 1963; 1308, 1000 GCT; 29°19.5'N, 121°31.5'W; sounding, 2161 fm; wind, 330°, force 5; weather, partly cloudy; sea, moderate; wire angle, 25°, 37°.

2	16.27	33.374	5.85	0.25	0	348	0	(16.27)	(33.37)	(5.85)	(24.45)	(349)	(0.00)
11	16.28	33.388	5.85	0.24	0	348	10	16.28	33.39	5.85	24.47	347	0.03
33	16.3	33.471	5.85	0.26	0	342	20	16.3	33.42	5.85	24.49	346	0.07
60	16.23	33.476	5.74	0.28	-	340	30	16.3	33.46	5.85	24.52	343	0.10
70	16.45	33.604	5.80	0.22	0	336	50	16.2	33.48	5.78	24.55	339	0.17
88	16.46	33.736	5.71	0.14	0	326	75	16.45	33.63	5.78	24.61	334	0.26
102	15.96	33.724	5.78	0.13	0	316	100	16.06	33.73	5.76	24.78	318	0.34
116	15.02	33.629	5.80	-	-	303	125	14.27	33.60	5.73	25.07	290	0.42
143	12.60	33.563	5.39	-	-	261	150	12.10	33.56	5.20	25.47	252	0.48
162	11.42	33.563	5.00	-	-	239	200	9.99	33.72	4.51	25.98	204	0.60
189	10.37	33.654	4.69	-	-	215	250	8.69	33.94	3.39	26.36	168	0.70
221	9.36	33.826	4.09	-	-	186	300	7.75	34.03	2.90	26.57	147	0.78
247	8.78	33.931	3.44	-	-	170	400	6.48	34.10	1.78	26.80	125	0.92
291	7.90	34.020	3.08	-	-	150	500	5.92	34.22	0.70	26.97	110	1.04
349	7.05	34.075	2.14	-	-	135	600	5.43	34.32	0.49	27.11	96	1.15
439	6.16	34.124	1.48	-	-	120	700	4.95	34.38	0.49	27.21	87	1.25
521	5.84	34.249	0.54	-	-	107	800	4.58	34.43	0.54	27.29	79	1.34
635	5.25	34.337	0.53	-	-	93	1000	3.96	34.49	0.67	27.41	68	1.51
898	4.26	34.465	0.82	-	-	73	1200	3.45	34.53	0.82	27.49	60	1.65
							1500	2.89	34.58	1.15	27.58	52	1.85
695a)	4.98	34.378	0.40	-	-	87	2000	2.12	34.64	1.92	27.70	41	2.13
820	4.51	34.430	0.44	-	-	78	2500	1.82	34.66	2.38	27.74	37	2.37
946	4.15	-	-	-	-		3000	1.65	34.68	2.70	27.76	34	2.60
1158	3.56	34.519	0.78	-	-	62							
1371	3.12	34.555	1.02	-	-	55							
1582	2.74	34.593	1.26	-	-	49							
1796	2.40	34.608	1.56	-	-	45							
2013	2.10	34.637	1.94	-	-	41							
2231	1.93	34.646	2.17	-	-	39							
2452	1.82	34.657	2.32	-	-	37							
2673	1.75	34.669	2.51	-	-	36							
2898	1.67	34.669	2.65	-	-	35							
3127	1.64	34.681	2.77	-	-	34							
3361	1.58	34.681	2.89	-	-	34							
3599	1.56	34.682	2.94	-	-	34							
3839	1.56	34.690	3.03	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

100.120

ALEXANDER AGASSIZ; May 7, 1963; 2129 GCT; 28°41'N, 122°46'W; sounding, 2200 fm; wind, 350°, force 2; weather, cloudy; sea, moderate; wire angle, 11°.

1	17.96	33.752	5.81	0.06	2	359	0	(17.96)	(33.75)	(5.81)	(24.35)	(359)	(0.00)
11	17.40	33.730	5.79	0.04	1	348	10	17.43	33.73	5.79	24.46	348	0.04
31	17.2	33.738	5.90	0.05	1	342	20	17.3	33.74	5.87	24.50	345	0.07
60	16.80	33.745	5.73	0.07	1	333	30	17.2	33.74	5.90	24.52	342	0.10
70	16.78	33.748	5.94	-	-	332	50	17.0	33.74	5.80	24.57	338	0.17
84	16.73	33.835	5.85	-	-	325	75	16.68	33.76	5.93	24.66	329	0.26
99	16.99	33.990	5.77	-	-	319	100	16.98	33.99	5.77	24.76	319	0.34
113	15.91	33.862	5.83	-	-	305	125	14.99	33.87	5.70	25.12	285	0.41
138	14.14	33.878	5.52	-	-	267	150	13.28	33.82	5.38	25.44	255	0.48
159	12.66	33.779	5.28	-	-	246	200	10.41	33.74	4.62	25.92	209	0.60
188	11.11	33.703	4.94	-	-	224	250	8.85	33.92	3.78	26.32	171	0.70
218	9.58	33.816	4.12	-	-	190	300	7.94	34.05	2.83	26.56	149	0.78
247	8.92	33.910	3.83	-	-	173	400	6.80	34.16	1.45	26.81	125	0.92
296	8.00	34.039	2.90	-	-	150	500	5.98	34.22	0.82	26.96	110	1.05
350	7.27	34.104	1.92	-	-	135	600	5.40	34.30	0.60	27.10	98	1.16
433	6.51	34.185	1.19	-	-	120							
518	5.86	34.238	0.76	-	-	108							
602	5.39	34.300	0.59	-	-	98							

110.35

ALEXANDER AGASSIZ; May 11, 1963; 0023 GCT; 29°46'N, 116°00'W; sounding, 760 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 50°.

1	15.82	33.638	6.10	0.32	1	319	0	(15.82)	(33.64)	(6.10)	(24.76)	(319)	(0.00)
8	15.82	33.637	6.10	0.32	1	319	10	15.8	33.64	6.11	24.77	319	0.03
23	15.7	33.644	6.20	0.32	1	316	20	15.8	33.64	6.15	24.77	319	0.06
30	15.32	33.632	6.16	0.32	3	309	30	15.32	33.63	6.16	24.87	309	0.10
39	14.16	33.545	6.07	0.42	3	292	50	12.62	33.52	5.16	25.34	264	0.15
48	12.76	33.517	5.28	-	-	267	75	10.52	33.59	4.41	25.78	222	0.21
63	11.79	33.590	4.53	-	-	244	100	10.55	33.92	2.76	26.03	198	0.27
74	10.53	33.594	4.43	-	-	222	125	10.05	33.94	2.90	26.14	189	0.32
85	10.50	33.707	3.90	-	-	213	150	9.46	34.02	2.73	26.30	173	0.36
103	10.56	33.939	2.70	-	-	197	200	8.79	34.08	2.53	26.45	159	0.45
120	10.19	33.936	2.89	-	-	191	250	8.26	34.20	1.63	26.63	142	0.52
142	9.63	33.986	2.88	-	-	179	300	7.97	34.27	1.13	26.73	133	0.59
158	9.31	34.053	2.61	-	-	169	400	7.47	34.36	0.58	26.87	119	0.73
202	8.78	34.090	2.51	-	-	158	500	6.55	34.34	0.51	26.98	108	0.85
224	8.50	34.169	1.92	-	-	148	600	6.01	34.38	0.49	27.08	99	0.96
275	8.10	34.233	1.38	-	-	137	700	5.56	34.42	0.45	27.17	90	1.06
377	7.65	34.357	0.63	-	-	122	800	5.09	34.44	0.42	27.24	84	1.16
513	6.46	34.341	0.50	-	-	107							
681	5.64	34.412	0.46	-	-	92							
839	4.88	34.447	0.37	-	-	81							

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110.40

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 10, 1963; 2057, 1925 GCT; 29°37'N, 116°20.5'W; sounding, 1218 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 23°, 30°.

1	16.50	33.701	-	0.24	5	330	0	(16.50)	(33.70)		(24.65)	(330)	(0.00)
10	16.48	33.687	5.89	0.28	5	330	10	16.48	33.69	5.89	24.65	330	0.03
33	15.90	33.678	5.94	0.28	3	318	20	16.30	33.69	5.90	24.69	326	0.07
42	13.53	33.638	4.75	-	-	273	30	16.00	33.68	5.93	24.75	320	0.10
56	11.26	33.617	4.39	-	-	233	50	11.47	33.61	4.46	25.63	237	0.15
70	10.74	33.661	4.01	-	-	221	75	10.49	33.68	3.82	25.86	215	0.21
94	10.10	33.830	3.27	-	-	198	100	9.98	33.84	3.25	26.07	195	0.26
111	9.90	33.852	3.23	-	-	193	125	9.79	33.96	2.83	26.20	183	0.31
129	9.70	33.995	2.71	-	-	179	150	9.04	34.03	2.68	26.37	166	0.35
158	8.94	34.050	2.67	-	-	163	200	8.68	34.16	2.26	26.53	151	0.44
185	8.82	34.140	2.48	-	-	155	250	8.62	34.29	1.26	26.64	141	0.51
221	8.44	34.176	1.85	-	-	146	300	8.58	34.38	0.79	26.72	133	0.58
249	8.62	34.282	1.29	-	-	141	400	6.86	34.29	0.64	26.90	116	0.71
294	8.62	34.382	0.80	-	-	134	500	6.27	34.34	0.54	27.02	105	0.83
354	7.50	34.318	0.74	-	-	123	600	5.74	34.38	0.38	27.12	96	0.94
447	6.68	34.302	0.62	-	-	113	700	5.24	34.41	0.35	27.20	88	1.04
533	6.10	34.367	0.50	-	-	101	800	4.77	34.45	0.43	27.29	79	1.13
607	5.69	34.384	0.44	-	-	95	1000	4.05	34.49	0.58	27.40	69	1.29
							1200	3.51	34.53	0.76	27.48	61	1.44
404a)	6.74	34.280	0.58	-	-	115	1500	2.81	34.58	1.18	27.59	51	1.64
643	5.54	34.395	0.21	-	-	92	2000	2.11	34.63	1.97	27.69	41	1.92
880	4.42	34.469	0.49	-	-	74							
1118	3.74	34.518	0.68	-	-	64							
1355	3.12	34.559	0.97	-	-	55							
1595	2.64	34.596	1.36	-	-	48							
1836	2.30	34.619	1.73	-	-	44							
2082	2.02	34.641	2.05	-	-	40							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 10, 1963; 1410, 1210 GCT; 29°16'N, 116°59'W; sounding, 2036 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 17°, 20°. 110.50

1	16.46	33.654	5.94	0.32	2	332	0	(16.46)	(33.65)	(5.94)	(24.62)	(332)	(0.00)
10	16.42	33.644	5.96	0.33	1	332	10	16.42	33.64	5.96	24.63	332	0.03
29	15.5	33.639	6.01	-	-	312	20	16.1	33.65	5.99	24.71	325	0.07
39	14.60	33.555	5.92	-	-	300	30	15.4	33.63	6.01	24.85	311	0.10
53	13.20	33.545	5.49	-	-	273	50	13.15	33.53	5.50	25.25	273	0.16
68	12.08	33.578	4.87	-	-	250	75	11.39	33.59	4.74	25.63	237	0.22
91	10.26	33.648	4.50	-	-	214	100	10.30	33.73	4.10	25.93	208	0.28
112	10.21	33.756	3.62	-	-	205	125	9.92	33.91	3.01	26.14	189	0.33
131	9.81	33.952	2.94	-	-	184	150	9.56	33.99	2.88	26.26	177	0.37
151	9.55	33.989	2.88	-	-	177	200	8.58	34.10	2.40	26.50	154	0.46
178	8.98	34.066	2.63	-	-	163	250	8.20	34.20	1.68	26.64	141	0.53
211	8.46	34.118	2.29	-	-	151	300	7.87	34.30	1.10	26.76	129	0.60
239	8.26	34.170	1.87	-	-	144	400	6.94	34.36	0.66	26.94	112	0.73
285	8.00	34.289	1.20	-	-	132	500	6.18	34.38	0.36	27.06	101	0.84
336	7.52	34.314	0.91	-	-	123	600	5.47	34.39	0.41	27.16	92	0.95
417	6.80	34.365	0.59	-	-	110	700	4.98	34.42	0.42	27.24	84	1.04
500	6.16	34.385	0.45	-	-	100	800	4.61	34.45	0.39	27.31	78	1.13
583	5.58	34.382	0.47	-	-	94	1000	3.92	34.50	0.60	27.42	67	1.29
							1200	3.39	34.53	0.83	27.50	60	1.44
520a)	6.04	34.378	0.22	-	-	99	1500	2.81	34.59	1.20	27.60	50	1.63
663	5.15	34.406	0.37	-	-	87	2000	2.07	34.64	1.97	27.70	40	1.90
808	4.58	34.454	0.38	-	-	77	2500	1.79	34.66	2.35	27.74	37	2.14
1001	3.92	34.499	0.60	-	-	67	3000	1.65	34.67	2.70	27.76	35	2.37
1231	3.32	34.541	0.86	-	-	58							
1482	2.84	34.584	1.18	-	-	51							
1723	2.44	34.606	1.56	-	-	46							
1964	2.10	34.634	1.95	-	-	41							
2205	1.94	34.647	2.15	-	-	39							
2448	1.81	34.655	2.72u	-	-	37							
2691	1.73	34.664	2.55	-	-	36							
2935	1.66	34.670	2.69	-	-	35							
3182	1.62	34.673	2.73	-	-	35							
3432	1.62	34.682	3.11	-	-	34							
3683b)	1.64	-	-	-	-								

ALEXANDER AGASSIZ; May 10, 1963; 0541 GCT; 28°56'N, 117°39'W; sounding, 1950 fm; wind, 340°, force 4; weather, cloudy; sea, moderate; wire angle, 23°. 110.60

2	16.66	33.563	5.91	0.37	0	343	0	(16.66)	(33.56)	(5.91)	(24.51)	(343)	(0.00)
11	16.38	33.539	5.92	0.41	0	339	10	16.40	33.54	5.91	24.55	339	0.03
30	16.3	33.543	5.97	0.40	1	337	20	16.3	33.54	5.94	24.58	337	0.07
56	15.26	33.576	6.01	-	-	312	30	16.3	33.54	5.97	24.58	337	0.10
65	15.04	33.584	6.12	-	-	307	50	15.4	33.57	6.00	24.80	315	0.17
78	14.03	33.476	5.92	-	-	294	75	14.45	33.52	6.00	24.97	300	0.24
92	13.13	33.438	5.72	-	-	280	100	12.40	33.54	5.01	25.40	259	0.31
105	12.09	33.582	4.70	-	-	250	125	10.71	33.63	4.33	25.78	222	0.38
126	10.70	33.633	4.31	-	-	222	150	10.30	33.85	3.36	26.02	199	0.43
144	10.50	33.823	3.39	-	-	205	200	9.25	34.10	2.60	26.39	164	0.52
171	9.50	33.931	3.28	-	-	181	250	9.10	34.28	1.40	26.56	149	0.60
197	9.24	34.070	2.79	-	-	166	300	8.57	34.31	1.07	26.67	138	0.68
223	9.33	34.233	1.56	-	-	156	400	7.41	34.33	0.87	26.85	120	0.81
265	8.92	34.293	1.30	-	-	145	500	6.37	34.34	0.51	27.01	106	0.93
312	8.44	34.316	1.01	-	-	136							
385	7.60	34.334	0.92	-	-	123							
461	6.66	34.320	0.63	-	-	111							
540	6.14	34.375	0.44	-	-	101							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Last bottle rested on the bottom; mud in water samples.

SIO

CCOFI
6304

110.70

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; May 10-9, 1963; 0013, 2206 GCT; 28°36'N, 118°18'W; sounding, 2040 fm; wind, 340°, force 3; weather, partly cloudy; sea, moderate; wire angle, 15°, 10°.

2	17.99	33.727	5.62	0.21	1	361	0	(17.99)	(33.73)	(5.62)	(24.32)	(361)	(0.00)
12	17.10	33.724	5.79	0.19	1	341	10	17.13	33.73	5.78	24.53	341	0.04
32	16.7	33.666	5.69	0.16	1	336	20	17.0	33.72	5.75	24.55	339	0.07
61	16.14	33.634	5.72	0.18	1	327	30	16.7	33.67	5.70	24.58	336	0.10
70	15.28	33.569	5.73	0.22	1	313	50	16.6	33.66	5.69	24.60	335	0.17
85	14.00	33.558	5.46	-	-	288	75	15.17	33.57	5.72	24.85	311	0.25
99	12.92	33.569	4.85	-	-	266	100	12.75	33.57	4.81	25.36	263	0.32
113	12.02	33.578	4.69	-	-	249	125	11.53	33.60	4.54	25.61	239	0.39
137	10.56	33.681	4.09	-	-	216	150	10.13	33.75	3.81	25.98	204	0.44
156	9.99	33.784	3.69	-	-	199	200	9.02	33.97	3.04	26.33	170	0.54
185	9.31	33.919	3.22	-	-	178	250	8.37	34.06	2.40	26.50	154	0.62
213	8.78	34.005	2.87	-	-	164	300	8.11	34.18	1.48	26.63	141	0.70
242	8.42	34.044	2.56	-	-	156	400	7.47	34.33	0.69	26.85	121	0.83
290	8.19	34.169	1.62	-	-	143	500	6.50	34.33	0.39	26.98	109	0.96
343	7.75	34.242	1.04	-	-	132	600	5.72	34.35	0.40	27.10	98	1.07
425	7.28	34.345	0.49	-	-	118	700	5.22	34.40	0.50	27.20	88	1.17
510	6.39	34.331	0.38	-	-	107	800	4.78	34.43	0.60	27.27	81	1.26
594	5.76	34.347	0.36	-	-	98	1000	4.04	34.48	0.75	27.39	70	1.43
							1200	3.51	34.53	1.00	27.48	61	1.58
444a)	7.28	34.356	0.70	-	-	117	1500	2.87	34.57	1.41	27.58	52	1.78
593	5.75	34.345	0.44	-	-	98	2000	2.07	34.63	2.25	27.69	41	2.06
742	5.04	34.413	0.55	-	-	85	2500	1.76	34.66	2.78	27.74	37	2.30
891	4.41	34.455	0.66	-	-	75	3000	1.65	34.67	2.97	27.76	35	2.53
1137	3.66	34.519	0.91	-	-	63							
1385	3.11	34.555	1.26	-	-	55							
1632	2.60	34.596	1.65	-	-	48							
1879	2.20	34.625	2.19	-	-	43							
2125	1.98	34.643	2.36	-	-	39							
2372	1.82	34.655	2.68	-	-	37							
2618	1.72	34.664	2.82	-	-	36							
2864	1.66	34.670	2.94	-	-	35							
3110	1.64	34.671	2.99	-	-	35							
3355	1.61	34.673	3.04	-	-	35							
3600	1.60	34.678	3.17	-	-	34							
3732b)	1.61	-	3.60	-	-								

a) Overlapping casts; reconciliation of property curves when necessary.
b) Last bottle rested on the bottom; mud in samples.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 9, 1963; 1622, 1410 GCT; 28°18.5'N, 119°00'W; sounding, 2116 fm; wind, 320°, force 3; weather, cloudy; sea, moderate; wire angle, 07°, 10°. 110.80

1	17.24	33.773	5.72	0.05	2	341	0	(17.24)	(33.77)	(5.72)	(24.53)	(341)	(0.00)
11	17.14	33.756	5.74	0.04	2	340	10	17.15	33.76	5.74	24.55	340	0.03
32	17.0	33.755	5.81	0.06	2	337	20	17.1	33.75	5.79	24.55	339	0.07
56	16.29	33.667	5.81	0.04	2	327	30	17.0	33.75	5.80	24.58	337	0.10
66	15.98	33.665	5.91	-	-	321	50	16.7	33.73	5.81	24.63	332	0.17
76	15.44	33.636	5.81	-	-	311	75	15.48	33.64	5.82	24.84	312	0.25
91	14.50	33.64	5.57	-	-	292	100	13.48	33.60	4.98	25.23	275	0.32
105	12.98	33.600	4.77	-	-	265	125	11.21	33.60	4.65	25.67	233	0.39
130	11.04	33.602	4.61	-	-	230	150	10.32	33.68	4.28	25.89	212	0.44
150	10.32	33.677	4.28	-	-	212	200	9.23	34.05	2.70	26.36	168	0.54
175	9.38	33.848	3.56	-	-	185	250	8.66	34.16	2.05	26.53	151	0.62
205	9.18	34.072	2.60	-	-	165	300	8.35	34.24	1.43	26.65	140	0.70
234	8.68	34.112	2.33	-	-	155	400	7.27	34.30	0.77	26.85	121	0.83
274	8.64	34.211	1.67	-	-	147	500	6.30	34.32	0.54	27.00	107	0.95
333	7.86	34.260	1.18	-	-	132	600	5.77	34.38	0.42	27.11	96	1.06
407	7.20	34.298	0.74	-	-	120	700	5.19	34.40	0.51	27.20	88	1.16
482	6.43	34.306	0.59	-	-	109	800	4.62	34.43	0.62	27.29	79	1.26
561	5.98	34.363	0.43	-	-	100	1000	3.99	34.50	0.71	27.41	68	1.42
							1200	3.47	34.54	0.90	27.50	60	1.57
445a)	6.86	34.308	0.63	-	-	115	1500	2.80	34.58	1.35	27.59	51	1.76
593	5.80	34.367	0.41	-	-	97	2000	2.10	34.64	2.10	27.70	41	2.03
839	4.46	34.441	0.62	-	-	77	2500	1.78	34.66	2.62	27.74	37	2.27
1084	3.77	34.522	0.77	-	-	64	3000	1.64	34.67	2.79	27.76	35	2.50
1330	3.16	34.563	1.10	-	-	55							
1575	2.67	34.588	1.48	-	-	49							
1820	2.28	34.627	1.88	-	-	43							
2063	2.04	34.638	2.21	-	-	40							
2307	1.88	34.651	2.49	-	-	38							
2551	1.76	34.665	2.64	-	-	36							
2796	1.68	34.673	2.78	-	-	35							
3038	1.64	34.670	2.79	-	-	35							
3283	1.60	34.683	2.93	-	-	34							
3525	1.58	34.680	3.09	-	-	34							
3769	1.58	34.678	3.11	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO

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6304

110.90

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 9, 1963; 0842, 0540 GCT; 27°57'N, 119°37'W; sounding, 2190 fm; wind, direction missing, force 1; weather, cloudy; sea, slight; wire angle, 00°, 06°.

1	17.12	33.545	5.60	0.29	2	355	0	(17.12)	(33.54)	(5.60)	(24.39)	(355)	(0.00)
11	16.66	33.543	5.65	0.30	2	345	10	16.67	33.54	5.65	24.49	345	0.04
31	16.5	33.520	5.64	0.30	1	343	20	16.6	33.53	5.65	24.50	344	0.07
56	17.07	33.781	5.59	0.28	2	336	30	16.5	33.52	5.64	24.52	343	0.10
66	17.20	33.856	5.57	0.28	2	334	50	17.0	33.74	5.60	24.57	338	0.17
76	17.06	33.831	5.62	0.24	2	333	75	17.08	33.83	5.60	24.62	333	0.26
91	16.55	33.810	5.61	-	-	323	100	15.98	33.77	5.63	24.83	313	0.34
106	15.34	33.723	5.64	-	-	303	125	13.39	33.62	5.14	25.27	271	0.41
130	13.04	33.609	4.99	-	-	265	150	11.92	33.70	4.20	25.62	238	0.48
150	11.92	33.696	4.20	-	-	238	200	9.67	33.91	3.03	26.18	185	0.58
176	10.56	33.758	3.70	-	-	210	250	8.85	34.12	2.06	26.47	157	0.67
206	9.53	33.951	2.84	-	-	180	300	8.33	34.16	1.72	26.59	146	0.75
236	9.02	34.095	2.18	-	-	161	400	7.37	34.29	0.75	26.83	123	0.89
276	8.58	34.146	1.91	-	-	151	500	6.51	34.35	0.35	26.99	107	1.01
335	7.98	34.199	1.39	-	-	138	600	5.80	34.38	0.39	27.11	96	1.12
411	7.26	34.278	0.68	-	-	122	700	5.24	34.40	0.45	27.19	88	1.22
485	6.61	34.334	0.24	-	-	110	800	4.81	34.45	0.47	27.28	80	1.31
567	6.02	34.360	0.15	-	-	100	1000	4.03	34.50	0.92	27.41	68	1.48
							1200	3.57	34.53	0.95	27.48	61	1.63
445a)	7.00	34.340	0.57	-	-	114	1500	2.92	34.59	1.34	27.59	51	1.83
546	6.16	34.372	0.49	-	-	101	2000	2.09	34.63	2.07	27.69	41	2.10
644	5.50	34.383	0.46	-	-	93	2500	1.81	34.66	2.61	27.74	37	2.35
793	4.84	34.445	0.46	-	-	81	3000	1.64	34.68	3.00	27.76	34	2.57
993	4.07	34.500	0.91	-	-	68	4000	(1.56)	(34.68)	(3.30)	(27.77)	(34)	(3.03)
1240	3.48	34.536	0.97	-	-	60							
1488	2.94	34.586	1.33	-	-	52							
1735	2.53	34.599	1.61	-	-	47							
1983	2.12	34.626	2.06	-	-	42							
2232	1.92	34.653	2.36	-	-	38							
2479	1.82	34.657	2.59	-	-	37							
2725	1.74	34.662	2.84	-	-	36							
2972	1.65	34.679	2.94	-	-	34							
3220	1.64	34.679	3.11	-	-	34							
3467	1.58	34.673	3.12	-	-	34							
3712	1.58	34.687	3.29	-	-	33							
3958	1.56	34.683	3.29	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

110.100

ALEXANDER AGASSIZ; May 8, 1963; 2346, 2115 GCT; 27°36.5'N, 120°15'W; sounding, 2220 fm; wind, 310°, force 3; weather, cloudy; sea, moderate; wire angle, 12°, 23°.

1	18.20	33.951	5.75		1	350	0	(18.20)	(33.95)	(5.75)	(24.44)	(350)	(0.00)
11	17.84	33.950	5.77		1	342	10	17.85	33.95	5.76	24.53	342	0.03
45	17.7	33.941	5.81		1	339	20	17.8	33.95	5.79	24.54	341	0.07
74	17.15	33.856	5.73		2	333	30	17.7	33.94	5.80	24.55	339	0.10
94	15.91	33.694	5.93		1	317	50	17.7	33.94	5.81	24.55	339	0.17
108	14.58	33.741	5.78		-	286	75	17.00	33.83	5.73	24.64	331	0.26
123	13.62	33.787	5.46		-	263	100	15.60	33.72	5.90	24.87	309	0.34
143	12.20	33.727	5.03		-	241	125	13.46	33.79	5.41	25.38	260	0.41
162	10.79	33.695	4.34		-	219	150	11.74	33.71	4.80	25.66	234	0.47
192	9.66	33.881	3.58		-	187	200	9.56	33.92	3.42	26.20	182	0.58
216	9.41	33.971	3.17		-	176	250	9.09	34.12	2.43	26.44	160	0.66
240	9.12	34.073	2.66		-	164	300	8.68	34.28	1.30	26.63	142	0.74
274	9.04	34.212	1.90		-	153	400	7.67	34.34	0.78	26.83	123	0.88
312	8.43	34.281	1.32		-	138	500	6.74	34.38	0.35	26.99	108	1.00
361	8.02	34.314	1.03		-	130	600	5.94	34.40	0.52	27.11	96	1.11
430	7.31	34.369	0.62		-	116	700	5.43	34.42	0.52	27.19	89	1.21
514	6.59	34.394	0.44		-	105	800	5.00	34.45	0.48	27.26	82	1.31
600	5.96	34.408	0.37		-	96	1000	4.21	34.49	0.74	27.38	71	1.48
							1200	3.61	34.53	1.02	27.47	62	1.63
325a)	8.45	34.309	0.96		-	137	1500	2.92	34.58	1.39	27.58	52	1.83
417	7.59	34.351	0.56		-	121	2000	2.18	34.63	1.84	27.68	42	2.11
512	6.66	34.382	0.27		-	107	2500	1.80	34.65	2.40	27.73	38	2.36
653	5.63	34.403	0.70		-	93	3000	1.64	34.67	2.77	27.76	35	2.59
891	4.63	34.470	0.46		-	76	4000	1.57	34.68	3.07	27.77	34	3.05
1129	3.80	34.519	1.02		-	64							
1369	3.20	34.563	1.02		-	56							
1609	2.72	34.590	1.61		-	49							
1849	2.35	34.611	1.68		-	45							
2090	2.10	34.640	1.98		-	41							
2329	1.90	34.649	2.27		-	38							
2570	1.78	34.656	2.73		-	37							
2811	1.69	34.670	2.63		-	35							
3053	1.63	34.671	2.79		-	35							
3295	1.61	34.673	2.83		-	35							
3537	1.58	34.682	3.30u		-	34							
3780	1.56	34.680	3.03		-	34							
4023	1.57	34.682	3.08		-	34							

110.120

ALEXANDER AGASSIZ; May 8, 1963; 1005 GCT; 26°55'N, 121°33.5'W; sounding, 2300 fm; wind, 330°, force 2; weather, cloudy; sea, rough; wire angle, 04°.

1	17.18	33.643	5.82	0.21	1	349	0	(17.18)	(33.64)	(5.82)	(24.45)	(349)	(0.00)
11	17.20	33.642	5.82	0.22	1	349	10	17.20	33.64	5.82	24.44	350	0.03
46	16.7	33.667	5.93	0.24	1	336	20	17.0	33.64	5.87	24.49	345	0.07
76	16.09	33.676	5.81	0.26	2	322	30	16.8	33.65	5.91	24.55	340	0.10
96	15.31	33.686	5.89	-	-	305	50	16.6	33.66	5.92	24.60	335	0.17
111	14.56	33.738	5.67	-	-	286	75	16.1	33.68	5.81	24.73	322	0.25
126	13.55	33.703	5.44	-	-	268	100	15.10	33.70	5.83	24.97	300	0.33
146	11.99	33.731	5.13	-	-	237	125	13.57	33.70	5.45	25.29	269	0.40
166	10.68	33.710	4.81	-	-	216	150	11.70	33.72	5.08	25.67	233	0.47
196	9.40	33.811	4.18	-	-	188	200	9.28	33.83	4.08	26.18	185	0.57
220	8.80	33.921	3.61	-	-	171	250	8.34	33.99	3.33	26.45	159	0.66
246	8.39	33.986	3.38	-	-	160	300	7.70	34.08	2.38	26.62	143	0.74
280	7.95	34.046	2.68	-	-	149	400	6.78	34.20	1.27	26.84	122	0.88
319	7.48	34.111	2.12	-	-	138	500	5.92	34.28	0.77	27.02	105	1.00
368	7.06	34.181	1.54	-	-	127	600	5.30	34.35	0.57	27.15	93	1.10
436	6.46	34.222	1.03	-	-	116							
521	5.77	34.293	0.72	-	-	102							
605	5.28	34.349	0.56	-	-	93							

a) Overlapping casts; reconciliation of property curves when necessary.

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m
113.30	ALEXANDER AGASSIZ; May 24, 1963; 1538 GCT; 29°21.5'N, 115°18'W; sounding, 35 fm; wind, 310°, force 3; weather, partly cloudy; sea, moderate; wire angle, 11°.												
1	11.44	33.930	4.57	1.02	27	213	0	(11.44)	(33.93)	(4.57)	(25.88)	(213)	(0.00)
11	11.37	33.956	4.09	1.02	30	210	10	11.38	33.96	4.11	25.92	209	0.02
20	11.4	33.966	3.82	1.03	33	209	20	11.4	33.97	3.82	25.92	209	0.04
30	11.33	33.977	3.53	-	-	207	30	11.33	33.98	3.53	25.94	207	0.06
40	10.72	33.985	2.71	-	-	196	50	10.58	33.95	1.68	26.05	197	0.10
50	10.58	33.946	1.68	-	-	197							
115.35	ALEXANDER AGASSIZ; May 24, 1963; 1100 GCT; 28°54.5'N, 115°27'W; sounding, 528 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 39°.												
2	13.84	33.899	6.11	0.60	21	260	0	(13.84)	(33.90)	(6.11)	(25.39)	(260)	(0.00)
10	13.81	33.890	6.17	0.49	21	260	10	13.81	33.89	6.17	25.39	260	0.03
30	13.6	33.883	5.93	0.48	20	256	20	13.8	33.90	6.16	25.40	259	0.05
37	13.36	33.869	5.99	0.60	18	252	30	13.6	33.88	5.93	25.42	256	0.08
48	13.08	33.878	5.56	0.38	21	246	50	13.00	33.89	5.29	25.55	244	0.13
60	12.66	33.952	4.42	-	-	233	75	11.45	34.01	2.70	25.94	207	0.18
77	11.27	34.019	2.47	-	-	203	100	10.67	34.14	1.25	26.18	184	0.23
91	10.78	34.104	1.30	-	-	189	125	9.57	34.13	2.00	26.37	167	0.28
105	10.39	34.140	1.26	-	-	179	150	9.17	34.14	2.17	26.44	160	0.32
126	9.56	34.126	2.04	-	-	167	200	8.90	34.22	1.58	26.54	150	0.40
145	9.22	34.124	2.10	-	-	162	250	8.82	34.36	0.88	26.67	138	0.47
170	9.08	34.184	1.81	-	-	155	300	8.39	34.37	0.69	26.74	131	0.54
190	9.06	34.219	1.63	-	-	152	400	7.77	34.40	0.46	26.86	120	0.68
219	8.62	34.215	1.54	-	-	146	500	7.07	34.40	0.30	26.96	111	0.80
260	8.88	34.395	0.70	-	-	137	600	6.20	34.41	0.27	27.08	99	0.91
320	8.22	34.364	0.69	-	-	129							
375	7.98	34.394	0.47	-	-	124							
423	7.57	34.398	0.46	-	-	118							
528	6.86	34.401	0.27	-	-	108							
687	5.54	34.415	0.27	-	-	91							
119.33	ALEXANDER AGASSIZ; May 12, 1963; 1621 GCT; 28°19'N, 114°53'W; sounding, 57 fm; wind, 320°, force 5; weather, partly cloudy; sea, very rough; wire angle, 18°.												
2	16.18	33.926	5.91	0.12	7	306	0	(16.18)	(33.93)	(5.91)	(24.90)	(306)	(0.00)
11	16.2	33.923	5.97	0.12	8	307	10	16.2	33.93	5.96	24.90	306	0.03
30	16.17	33.926	5.96	0.13	7	306	20	16.2	33.93	5.97	24.90	306	0.06
49	16.16	33.927	5.77	0.16	6	306	30	16.17	33.93	5.96	24.91	306	0.09
73	14.24	33.819	5.59	-	-	273	50	16.16	33.93	5.79	24.91	305	0.15
97	11.38	34.015	1.93	-	-	205	75	14.00	33.82	5.48	25.30	269	0.23
							100	(11.18)	(34.03)	(1.70)	(26.01)	(201)	(0.28)

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 13-12, 1963; 0153, 2352 GCT; 27°43'N, 115°33'W; sounding, 1310 fm; wind, 330°, force 5; weather, partly cloudy; sea, very rough; wire angle, 37°, 57°. 12045

2	16.10	33.868	6.29	0.44	4	309	0	(16.10)	(33.87)	(6.29)	(24.88)	(308)	(0.00)
10	16.12	33.864	6.07	0.45	4	309	10	16.12	33.86	6.07	24.86	310	0.03
31	15.8	33.875	6.07	0.51	7	302	20	16.1	33.87	6.07	24.88	308	0.06
55	13.11	33.747	4.15	1.12	8	257	30	15.8	33.87	6.07	24.94	302	0.09
63	12.58	33.799	3.95	1.30	10	243	50	13.5	33.75	4.39	25.34	264	0.15
79	11.48	33.793	3.50	-	-	223	75	11.53	33.79	3.52	25.76	225	0.21
91	11.18	33.841	3.34	-	-	215	100	11.35	34.00	3.16	25.95	206	0.27
101	11.36	34.010	2.15	-	-	205	125	10.18	33.99	2.69	26.15	187	0.31
123	10.20	33.988	2.70	-	-	187	150	10.15	34.14	2.21	26.28	175	0.36
137	10.06	34.037	2.55	-	-	182	200	9.60	34.29	1.62	26.49	156	0.45
158	10.20	34.202	1.99	-	-	172	250	9.63	34.44	0.93	26.60	145	0.52
183	9.84	34.271	1.78	-	-	161	300	8.95	34.44	0.66	26.71	134	0.60
205	9.57	34.29 a)	1.56	-	-	155	400	8.05	34.44	0.33	26.85	121	0.73
241	9.70	34.435	0.98	-	-	146	500	6.99	34.45	0.29	27.01	106	0.85
290	9.14	34.436	0.88	-	-	138	600	6.12	34.45	0.26	27.12	95	0.96
367	8.42	34.460	0.37	-	-	125	700	5.56	34.46	0.27	27.20	87	1.06
441	7.66	34.440	0.39	-	-	116	800	5.10	34.46	0.34	27.26	82	1.15
504	6.96	34.462	0.37	-	-	105	1000	4.27	34.50	0.49	27.38	70	1.32
							1200	3.52	34.55	0.77	27.50	59	1.47
276b)	9.16	34.429	0.63	-	-	138	1500	2.89	34.59	1.22	27.59	51	1.67
364	8.28	34.436	0.37	-	-	125							
453	7.54	34.437	0.28	-	-	114							
539	6.59	34.436	0.20	-	-	102							
687	5.63	34.452	0.26	-	-	89							
846	4.89	34.465	0.39	-	-	80							
1006	4.26	34.499	0.50	-	-	70							
1170	3.61	34.542	0.74	-	-	61							
1337	3.24	34.564	0.92	-	-	56							
1488	2.93	34.589	1.19	-	-	51							
1662	2.66	34.606	1.34	-	-	48							

ALEXANDER AGASSIZ; May 13, 1963; 0620 GCT; 27°32'N, 115°52'W; sounding, 2287 fm; wind, 340°, force 5; weather, partly cloudy; sea, very rough; wire angle, 33°. 120.50

2	16.77	33.937	5.87	0.37	0	318	0	(16.77)	(33.94)	(5.87)	(24.78)	(318)	(0.00)
10	16.76	33.958	5.88	0.42	0	317	10	16.76	33.96	5.88	24.79	316	0.03
31	16.8	33.927	5.97	0.30	0	320	20	16.8	33.95	5.93	24.78	318	0.06
40	15.63	33.853	5.43	-	-	300	30	16.8	33.93	5.96	24.76	319	0.10
53	13.68	33.738	4.85	0.16	6	268	50	13.74	33.73	4.86	25.28	270	0.15
66	12.82	33.816	4.35	-	-	246	75	11.58	33.88	3.45	25.82	219	0.22
87	11.18	33.910	3.03	-	-	210	100	11.29	34.09	2.20	26.03	198	0.27
104	11.08	34.088	2.04	-	-	195	125	10.12	34.07	2.50	26.23	180	0.32
120	10.05	34.024	2.66	-	-	182	150	10.38	34.28	1.55	26.34	169	0.36
144	10.55	34.296	1.44	-	-	170	200	8.73	34.16	2.16	26.52	152	0.44
167	9.32	34.153	2.19	-	-	161	250	8.48	34.30	1.26	26.67	138	0.52
197	8.75	34.160	2.20	-	-	152	300	8.41	34.40	0.78	26.76	129	0.59
219	8.60	34.227	1.67	-	-	145	400	7.48	34.41	0.52	26.91	115	0.72
259	8.46	34.314	1.18	-	-	136	500	6.62	34.42	0.47	27.03	103	0.83
312	8.40	34.417	0.70	-	-	128							
396	7.51	34.415	0.53	-	-	115							
476	6.83	34.416	0.48	-	-	106							
546	6.18	34.444	0.46	-	-	96							

a) Alternate value, 34.26‰, not used in interpolation.
b) Overlapping casts; reconciliation of property curves when necessary.

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120.60

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; May 13, 1963; 1703, 1450 GCT; 27°11'N, 116°32'W; sounding, 2044 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 13°, 26°.

1	16.87	33.892	5.93	0.42	2	324	0	(16.87)	(33.89)	(5.93)	(24.71)	(324)	(0.00)
11	16.86	33.891	5.87	0.38	1	324	10	16.86	33.89	5.88	24.72	324	0.03
35	15.0	33.689	5.84	0.48	3	298	20	16.6	33.86	5.86	24.75	320	0.06
45	14.03	33.877	4.20	-	-	265	30	16.4	33.80	5.85	24.75	320	0.10
59	12.28	33.766	4.43	-	-	240	50	13.10	33.78	4.30	25.45	254	0.15
74	12.00	33.911	3.08	-	-	224	75	12.00	33.92	3.05	25.77	223	0.21
98	11.06	33.995	2.32	-	-	201	100	11.03	34.01	2.28	26.02	200	0.27
117	10.84	34.156	1.73	-	-	186	125	10.78	34.23	1.48	26.24	179	0.32
136	10.66	34.275	1.30	-	-	174	150	10.52	34.32	1.22	26.35	168	0.36
166	10.38	34.343	1.16	-	-	164	200	10.02	34.41	0.81	26.51	153	0.44
195	10.07	34.403	0.82	-	-	155	250	9.29	34.42	0.69	26.64	141	0.52
233	9.60	34.432	0.72	-	-	145	300	8.48	34.39	0.63	26.74	131	0.59
262	9.08	34.410	0.68	-	-	139	400	7.37	34.41	0.45	26.92	114	0.72
310	8.36	34.384	0.62	-	-	130	500	6.42	34.41	0.32	27.05	102	0.83
372	7.55	34.398	0.48	-	-	117	600	5.71	34.42	0.33	27.15	92	0.94
469	6.66	34.401	0.34	-	-	105	700	5.14	34.45	0.55	27.24	83	1.03
557	5.96	34.412	0.29	-	-	96	800	4.78	34.46	0.72	27.29	79	1.12
631	5.50	34.434	0.35	-	-	89	1000	4.02	34.50	0.73	27.41	68	1.29
							1200	3.57	34.54	0.86	27.49	61	1.43
367a)	7.86	34.421	0.57	-	-	120	1500	2.93	34.58	1.25	27.58	52	1.63
555	6.13	34.407	0.36	-	-	98	2000	2.13	34.64	2.05	27.69	41	1.91
791	4.82	34.455	0.72	-	-	80	2500	1.79	34.67	2.60	27.75	36	2.15
981	4.08	34.500	0.72	-	-	69	3000	1.62	34.68	2.90	27.77	34	2.38
1218	3.54	34.545	0.88	-	-	60							
1455	3.02	34.570	1.16	-	-	53							
1693	2.58	34.606	1.65	-	-	47							
1931	2.22	34.630	1.94	-	-	42							
2169	1.97	34.647	2.36	-	-	39							
2405	1.82	34.661	2.49	-	-	37							
2645	1.74	34.669	2.74	-	-	36							
2884	1.65	34.675	2.89	-	-	35							
3121	1.60	34.679	2.90	-	-	34							
3362	1.59	34.681	3.01	-	-	34							
3604	1.58	34.684	3.42	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

120.70

ALEXANDER AGASSIZ; May 14-13, 1963; 0059, 2257 GCT; 26°52.5'N, 117°13'W; sounding, 2044 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 16°, 22°.

1	16.66	33.850	6.00	0.50	2	322	0	(16.66)	(33.85)	(6.00)	(24.73)	(322)	(0.00)
11	16.66	33.845	6.05	0.42	2	323	10	16.66	33.85	6.03	24.73	322	0.03
35	14.9	33.841	5.50	0.80	5	285	20	16.4	33.84	5.99	24.78	317	0.06
44	13.32	33.828	4.54	1.18	12	255	30	16.1	33.86	5.90	24.87	309	0.10
59	12.18	33.816	3.83	1.52	13	234	50	12.85	33.82	4.23	25.53	246	0.15
73	11.38	33.841	3.90	-	-	218	75	11.36	33.85	3.89	25.84	217	0.21
97	10.59	33.932	2.97	-	-	198	100	10.64	33.96	2.90	26.05	197	0.26
116	10.62	34.160	1.94	-	-	182	125	10.47	34.19	1.84	26.26	177	0.31
136	10.26	34.218	1.75	-	-	171	150	10.27	34.30	1.44	26.38	166	0.35
166	10.28	34.396	1.04	-	-	159	200	9.89	34.43	0.92	26.55	150	0.43
195	9.99	34.437	0.92	-	-	151	250	9.23	34.42	0.83	26.65	140	0.51
233	9.32	34.394	0.89	-	-	143	300	8.55	34.42	0.80	26.76	130	0.58
262	9.18	34.439	0.80	-	-	138	400	7.84	34.45	0.31	26.89	117	0.71
310	8.43	34.416	0.80	-	-	128	500	6.83	34.43	0.38	27.01	105	0.83
373	8.06	34.450	0.31	-	-	121	600	5.87	34.42	0.40	27.13	94	0.93
470	7.12	34.433	0.48	-	-	109	700	5.28	34.43	0.38	27.21	87	1.03
558	6.17	34.412	0.43	-	-	98	800	4.76	34.46	0.37	27.30	79	1.12
633	5.66	34.421	0.43	-	-	92	1000	4.12	34.51	0.74	27.41	68	1.29
							1200	3.55	34.54	0.92	27.49	60	1.44
466a)	7.30	34.456	0.19	-	-	110	1500	2.96	34.59		27.58	51	1.63
607	5.88	34.416	0.37	-	-	95	2000	2.15	34.64	2.21	27.69	41	1.91
795	4.78	34.453	0.37	-	-	79	2500	1.79	34.66	2.64	27.74	37	2.15
1029	4.04	34.509	0.77	-	-	67	3000	1.64	34.68	3.00	27.76	34	2.38
1263	3.40b)	34.549	0.99	-	-	58							
1499	2.96	34.586	2.14	-	-	52							
1736	2.56	34.608	1.75	-	-	47							
1970	2.18	34.633	2.20	-	-	42							
2204	1.97	34.649	2.39	-	-	39							
2440	1.82	34.657	2.61	-	-	37							
2675	1.72	34.671	2.68	-	-	35							
2910	1.66	34.673	2.88	-	-	35							
3147	1.62	34.676	3.02	-	-	34							
3383	1.59	34.678	3.04	-	-	34							
3573	1.58	34.688	-	-	-	33							

120.80

ALEXANDER AGASSIZ; May 14, 1963; 0652 GCT; 26°32.5'N, 117°49'W; sounding, 2124 fm; wind, 350°, force 5; weather, cloudy; sea, rough; wire angle, 30°.

2	16.88	33.714	5.88	0.34	0	337	0	(16.88)	(33.71)	(5.88)	(24.57)	(337)	(0.00)
10	16.90	33.714	5.89	0.32	1	337	10	16.90	33.71	5.89	24.57	338	0.03
32	16.9	33.716	5.96	0.07u	1	337	20	16.9	33.71	5.93	24.57	338	0.07
41	16.33	33.720	5.85	0.39	1	324	30	16.9	33.71	5.96	24.57	338	0.10
54	15.66	33.736	5.84	0.22	0	309	50	15.72	33.73	5.85	24.85	311	0.17
67	14.78	33.663	5.72	-	-	296	75	14.30	33.80	4.74	25.22	276	0.24
87	14.08	33.832	4.21	-	-	269	100	12.90	33.82	3.58	25.52	247	0.31
105	12.48	33.807	3.54	-	-	240	125	11.40	33.82	3.56	25.80	220	0.37
121	11.42	33.780	3.72	-	-	223	150	11.28	34.08	2.18	26.03	199	0.42
145	11.36	34.053	2.23	-	-	202	200	9.83	34.21	1.99	26.38	165	0.51
170	10.60	34.130	2.20	-	-	184	250	9.13	34.29	1.38	26.56	148	0.59
200	9.83	34.206	1.99	-	-	165	300	8.74	34.37	0.99	26.69	136	0.67
223	9.32	34.229	1.78	-	-	156	400	7.53	34.37	0.64	26.87	119	0.80
261	9.05	34.319	1.24	-	-	145	500	6.62	34.38	0.54	27.00	106	0.92
312	8.61	34.369	0.92	-	-	135							
394	7.58	34.372	0.66	-	-	120							
475	6.85	34.374	0.57	-	-	110							
545	6.18	34.392	0.54	-	-	100							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 3.37 and 3.43°C.

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120.90

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 14, 1963; 1505, 1222 GCT; 26°14'N, 118°27'W; sounding, 2199 fm; wind, 010°, force 4; weather, cloudy; sea, moderate; wire angle, 22°, 45°.

1	17.64	33.839	5.74	0.37	1	345	0	(17.64)	(33.84)	(5.74)	(24.49)	(345)	(0.00)
10	17.66	33.833	5.76	0.34	0	346	10	17.66	33.83	5.76	24.48	346	0.03
33	17.7	33.836	5.79	0.34	1	347	20	17.7	33.83	5.77	24.47	347	0.07
60	17.45	33.920	5.68	0.34	1	335	30	17.7	33.84	5.78	24.48	346	0.10
69	17.12	33.914	5.83	-	-	328	50	17.5	33.90	5.70	24.57	337	0.17
86	16.12	33.888	5.78	-	-	308	75	16.76	33.91	5.82	24.75	320	0.26
100	15.06	33.859	5.72	-	-	287	100	15.06	33.86	5.72	25.10	287	0.33
113	14.18	33.826	5.50	-	-	272	125	12.74	33.75	5.17	25.50	249	0.40
139	11.55	33.696	4.88	-	-	232	150	11.09	33.70	4.57	25.77	224	0.46
158	10.77	33.705	4.30	-	-	218	200	9.48	33.96	3.28	26.25	178	0.56
184	9.82	33.860	3.56	-	-	191	250	8.88	34.16	2.18	26.50	154	0.65
214	9.25	34.036	2.98	-	-	169	300	8.40	34.23	1.54	26.63	142	0.72
241	8.94	34.138	2.33	-	-	157	400	7.29	34.28	0.83	26.83	123	0.86
286	8.54	34.223	1.68	-	-	144	500	6.40	34.34	0.50	27.00	107	0.98
345	7.91	34.263	1.25	-	-	132	600	5.79	34.39	0.55	27.12	95	1.09
438	7.06	34.324	0.74	-	-	116	700	5.32	34.41	0.52	27.19	88	1.19
524	6.17	34.350	0.53	-	-	103	800	4.88	34.43	0.48	27.26	82	1.29
595	5.74	34.381	0.56	-	-	96	1000	4.13	34.51	0.51	27.40	68	1.45
							1200	3.58	34.55	0.72	27.49	60	1.60
332a)	8.02	34.237	1.19	-	-	136	1500	2.93	34.58	1.10	27.58	52	1.80
489	6.58	34.331	0.45	-	-	109	2000	2.14	34.64	1.91	27.69	41	2.08
650	5.64	34.412	0.53	-	-	92	2500	1.80	34.66	2.38	27.74	37	2.32
853	4.68	34.446	0.44	-	-	79	3000	1.63	34.67	2.78	27.76	35	2.55
1059	3.95	34.525	0.57	-	-	65							
1268	3.42	34.555	0.80	-	-	58							
1478	2.99	34.579	1.08	-	-	52							
1695	2.56	34.611	1.40	-	-	46							
1915	2.23	34.628	1.81	-	-	43							
2139	2.02	34.643	2.06	-	-	40							
2367	1.88	34.656	2.27	-	-	38							
2592	1.76	34.662	2.44	-	-	36							
2819	1.68	34.671	2.63	-	-	35							
3048	1.62	34.673	2.82	-	-	35							
3280	1.58	34.684	2.87	-	-	34							
3516	1.58	34.685	2.99	-	-	33							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

120.100

ALEXANDER AGASSIZ; May 14, 1963; 2231, 2016 GCT; 25°58'N, 119°06.5'W; sounding, 2150 fm; wind, 010°, force 4; weather, cloudy; sea, rough; wire angle, 20°, 32°.

1	17.96	33.802	5.65	0.32	1	355	0	(17.96)	(33.80)	(5.65)	(24.38)	(355)	(0.00)
10	17.92	33.801	5.52	0.34	1	354	10	17.92	33.80	5.52	24.39	354	0.04
34	17.8	33.795	5.55	0.34	1	352	20	17.9	33.80	5.53	24.40	354	0.07
62	16.74	33.761	5.71	0.34	1	330	30	17.8	33.80	5.54	24.42	352	0.11
72	16.48	33.745	5.72	0.32	1	326	50	17.0	33.76	5.68	24.58	336	0.18
90	16.56	33.929	5.69	-	-	314	75	16.49	33.78	5.72	24.72	324	0.26
105	15.48	33.884	5.52	-	-	294	100	16.00	33.91	5.59	24.93	303	0.34
120	14.58	33.838	5.44	-	-	279	125	14.22	33.83	5.39	25.26	272	0.41
148	12.36	33.770	4.91	-	-	241	150	12.24	33.76	5.89	25.60	239	0.47
167	11.26	33.714	4.70	-	-	226	200	9.73	33.83	3.73	26.10	192	0.58
196	9.86	33.804	3.82	-	-	196	250	8.62	34.00	3.19	26.42	162	0.68
228	9.01	33.958	3.38	-	-	171	300	8.05	34.15	1.85	26.62	143	0.75
257	8.52	34.015	3.11	-	-	160	400	6.98	34.26	0.77	26.86	120	0.89
304	8.00	34.160	1.75	-	-	141	500	6.30	34.33	0.45	27.01	106	1.01
365	7.32	34.219	1.06	-	-	128	600	5.79	34.38	0.38	27.11	96	1.12
461	6.48	34.301	0.52	-	-	110	700	5.22	34.44	0.46	27.23	85	1.22
550	6.04	34.358	0.37	-	-	101	800	4.75	34.47	0.65	27.31	78	1.31
624	5.70	34.406	0.31	-	-	93	1000	4.10	34.50	0.78	27.40	69	1.47
							1200	3.60	34.54	0.90	27.48	61	1.62
444a)	6.65	34.296	-	-	-	113	1500	2.95	34.59	1.35	27.58	51	1.82
533	6.17	34.347	0.45	-	-	103	2000	2.14	34.63	2.13	27.69	42	2.10
669	5.32	34.412	0.46	-	-	88	2500	1.81	34.67	2.55	27.74	36	2.34
898	4.42	34.487	0.73	-	-	73	3000	1.64	34.68	2.90	27.76	34	2.57
1128	3.76	34.527	0.82	-	-	63							
1361	3.26	34.569	1.11	-	-	56							
1591	2.77	34.593	1.45	-	-	50							
1824	2.38	34.622	1.90	-	-	44							
2058	2.08	34.640	2.18	-	-	40							
2291	1.90	34.660	2.50	-	-	38							
2526	1.80	34.669	2.59	-	-	36							
2760	1.70	34.668	2.82	-	-	36							
2994	1.64	34.684	2.89	-	-	34							
3230	1.60	34.679	3.04	-	-	34							
3466	1.58	34.690	3.10	-	-	33							

120.120

ALEXANDER AGASSIZ; May 15, 1963; 0706 GCT; 25°12.5'N, 120°22.5'W; sounding, 2178 fm; wind, 020°, force 4; weather, clear; sea, rough; wire angle, 18°.

2	18.29	34.065	5.63	0.32	2	344	0	(18.29)	(34.06)	(5.63)	(24.50)	(344)	(0.00)
11	18.31	34.066	5.61	0.31	1	344	10	18.31	34.07	5.62	24.50	344	0.03
49	18.4	34.160	5.67	0.30	0	339	20	18.3	34.08	5.61	24.51	343	0.07
82	18.27	34.169	5.57	0.30	1	336	30	18.4	34.11	5.63	24.51	343	0.10
101	16.02	33.919	5.58	0.41	2	303	50	18.4	34.16	5.67	24.55	339	0.17
116	14.97	33.842	5.20	-	-	287	75	18.3	34.17	5.58	24.58	336	0.26
136	13.36	33.787	4.68	-	-	258	100	16.10	33.92	5.58	24.91	305	0.34
155	12.28	33.796	4.34	-	-	238	125	14.28	33.81	4.96	25.23	275	0.41
175	11.07	33.756	4.65	-	-	219	150	12.58	33.80	4.40	25.57	243	0.48
203	10.06	33.872	3.73	-	-	194	200	10.16	33.85	3.85	26.05	197	0.59
231	9.39	34.067	2.81	-	-	169	250	9.24	34.14	2.43	26.43	161	0.68
255	9.21	34.152	2.32	-	-	160	300	8.71	34.27	1.47	26.61	143	0.76
288	8.86	34.251	1.63	-	-	147	400	7.49	34.31	0.92	26.83	123	0.90
331	8.36	34.295	1.24	-	-	136	500	6.66	34.34	0.65	26.97	110	1.02
384	7.68	34.302	0.98	-	-	126	600	6.03	34.41	0.51	27.10	97	1.13
465	6.94	34.325	0.75	-	-	115							
553	6.28	34.378	0.53	-	-	102							
626	5.96	34.433	0.50	-	-	94							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
123.42	ALEXANDER AGASSIZ; May 23, 1963; 1521 GCT; 27°14'N, 114°59'W; sounding, 1578 fm; wind, 340°, force 5; weather, cloudy; sea, rough; wire angle, 50°.												
2	17.00	33.892	5.88	0.44	2	327	0	(17.00)	(33.89)	(5.88)	(24.68)	(327)	(0.00)
9	17.00	33.890	5.81	0.52	2	327	10	17.0	33.89	5.81	24.68	327	0.03
25	16.8	33.897	5.81	0.42	2	322	20	17.0	33.89	5.81	24.68	327	0.07
30	16.34	33.864	5.73	-	-	314	30	16.34	33.86	5.73	24.81	314	0.10
39	15.68	33.879	5.54	-	-	299	50	14.62	33.88	4.28	25.21	277	0.16
49	14.76	33.882	4.42	-	-	279	75	11.79	33.73	4.18	25.66	234	0.22
63	12.83	33.832	3.59	-	-	245	100	10.94	33.89	2.97	25.94	207	0.28
74	11.90	33.736	4.18	-	-	235	125	10.52	34.10	2.23	26.18	184	0.33
84	11.20	33.740	4.01	-	-	223	150	10.34	34.24	1.74	26.32	171	0.37
100	10.94	33.894	2.97	-	-	207	200	10.02	34.36	1.25	26.47	157	0.46
112	10.70	33.978	2.82	-	-	196	250	9.73	34.48	0.74	26.61	144	0.53
131	10.48	34.150	2.03	-	-	180	300	9.23	34.48	0.49	26.69	136	0.61
146	10.38	34.225	1.75	-	-	173							
168	10.26	34.291	1.66	-	-	166							
200	10.02	34.359	1.25	-	-	157							
254	9.70	34.483	0.71	-	-	143							
312	9.12	34.481	0.46	-	-	134							
368	8.62	34.492	0.50	-	-	126							
127.40	ALEXANDER AGASSIZ; May 23, 1963; 0945, 0707 GCT; 26°44'N, 114°28.5'W; sounding, 1567 fm; wind, 050°, force 2; weather, clear; sea, slight; wire angle, 16°, 20°.												
1	16.84	33.911	6.14	0.32	0	322	0	(16.84)	(33.91)	(6.14)	(24.74)	(322)	(0.00)
11	16.84	33.912	5.93	0.32	0	322	10	16.84	33.91	5.94	24.74	322	0.03
30	16.9	33.909	5.93	0.34	1	323	20	16.9	33.91	5.93	24.72	323	0.06
59	14.23	33.753	4.97	-	-	278	30	16.9	33.91	5.93	24.72	323	0.10
68	13.51	33.726	4.80	-	-	266	50	15.6	33.83	5.40	24.96	301	0.16
83	12.70	33.741	4.32	-	-	249	75	13.23	33.73	4.62	25.38	260	0.23
97	11.37	33.714	4.27	-	-	227	100	11.22	33.73	4.13	25.77	224	0.29
112	10.86	33.850	3.28	-	-	209	125	10.66	34.00	2.65	26.08	194	0.34
136	10.60	34.118	2.24	-	-	184	150	10.81	34.32	1.47	26.30	173	0.39
156	10.86	34.381	1.27	-	-	169	200	10.02	34.40	1.10	26.50	154	0.47
185	10.22	34.386	1.23	-	-	158	250	9.87	34.49	0.75	26.60	145	0.55
214	9.97	34.427	1.00	-	-	151	300	9.30	34.51	0.56	26.71	135	0.62
243	9.92	34.483	0.81	-	-	146	400	8.19	34.48	0.44	26.86	120	0.76
291	9.40	34.512	0.57	-	-	136	500	7.07	34.43	0.35	26.98	108	0.88
345	8.82	34.494	0.52	-	-	128	600	6.30	34.43	0.30	27.09	99	0.99
428	7.86	34.465	0.50	-	-	117	700	5.68	34.44	0.29	27.17	90	1.09
512	6.90	34.418	0.44	-	-	107	800	5.16	34.46	0.30	27.25	83	1.19
597	6.24	34.434	0.44	-	-	98	1000	4.24	34.51	0.46	27.39	69	1.36
							1200	3.66	34.54	0.71	27.48	61	1.51
430a)	7.92	34.466	0.27	-	-	117	1500	2.98	34.58	1.12	27.57	52	1.71
573	6.56	34.427	0.21	-	-	102	2000	2.18	34.64	1.90	27.69	41	2.00
812	5.10	34.462	0.30	-	-	82	2500	1.84	34.66	2.38	27.73	37	2.24
1053	4.02	34.521	0.53	-	-	66							
1294	3.44	34.557	0.83	-	-	58							
1539	2.90	34.593	1.18	-	-	51							
1786	2.46	34.615	1.60	-	-	45							
2030	2.15	34.640	1.93	-	-	41							
2276	1.94	34.655	2.24	-	-	38							
2523	1.82	34.660	2.40	-	-	37							
2771	1.74	34.671	2.57	-	-	36							
130.30	ALEXANDER AGASSIZ; May 18, 1963; 0915 GCT; 26°30.5'N, 113°29'W; sounding, 36 fm; wind, 310°, force 1; weather, partly cloudy; sea, rough; wire angle, 00°.												
1	15.94	33.870	5.87	0.64	6	305	0	(15.94)	(33.87)	(5.87)	(24.91)	(305)	(0.00)
11	15.96	33.868	5.89	0.64	5	306	10	15.95	33.87	5.89	24.91	305	0.03
31	13.1	33.862	4.35	1.12	13	248	20	14.6	33.86	5.20	25.20	278	0.06
51	11.91	33.985	2.17	1.01	22	217	30	13.2	33.86	4.43	25.49	250	0.09
							50	12.0	33.98	2.25	25.82	219	0.13

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

13040

ALEXANDER AGASSIZ; May 18, 1963; 0317 GCT; 26°10.5'N, 114°08.5'W; sounding, 1340 fm; wind, 310°, force 6; weather, partly cloudy; sea, very rough; wire angle, 25°.

2	16.68	33.868	–	0.38	1	321	0	(16.68)	(33.87)		(24.74)	(321)	(0.00)
10	16.69	33.864	–	0.40	1	322	10	16.69	33.86		24.73	322	0.03
33	16.7	33.865	–	0.38	1	322	20	16.7	33.86		24.73	322	0.06
61	14.42	33.744	–	–	–	283	30	16.7	33.86		24.73	322	0.10
71	13.10	33.679	–	–	–	261	50	16.2	33.83		24.82	314	0.16
89	12.26	33.838	–	–	–	234	75	12.13	33.69		25.57	243	0.23
103	10.92	33.774	–	–	–	215	100	11.12	33.78		25.82	218	0.29
117	10.44	33.921	–	–	–	196	125	10.26	33.97		26.12	190	0.34
144	9.98	34.086	–	–	–	177	150	10.01	34.12		26.28	175	0.39
163	10.25	34.219	–	–	–	171	200	10.24	34.40		26.46	158	0.47
191	10.18	34.347	–	–	–	161	250	10.17	34.55		26.59	145	0.55
223	10.47	34.544	–	–	–	151	300	9.00	34.44	0.70	26.70	135	0.62
251	10.16	34.549	–	–	–	145	400	8.27	34.48	0.48	26.85	121	0.76
297	9.04	34.439	0.73	–	–	136	500	7.13	34.44	0.45	26.98	108	0.88
359	8.62	34.473	0.48	–	–	127	600	6.22	34.44	0.40	27.10	97	0.99
454	7.74	34.478	0.48	–	–	114							
541	6.67	34.429	0.42	–	–	103							
613	6.14	34.440	0.40	–	–	96							

13050

ALEXANDER AGASSIZ; May 17, 1963; 2157, 1952 GCT; 25°43.5'N, 114°47.5'W; sounding, 1986 fm; wind, 320°, force 4; weather, cloudy; sea, very rough; wire angle, 30°, 43°.

1	17.62	33.932	5.67	0.40	2	338	0	(17.62)	(33.93)	(5.67)	(24.57)	(338)	(0.00)
9	17.57	33.933	5.71	0.36	2	337	10	17.6	33.93	5.73	24.57	338	0.03
31	17.1	33.912	6.09	0.38	2	328	20	17.4	33.92	5.93	24.61	334	0.07
58	16.55	33.890	5.63	0.43	2	317	30	17.1	33.91	6.08	24.67	328	0.10
67	16.17	33.870	5.79	–	–	310	50	16.7	33.90	5.78	24.76	319	0.17
83	14.06	33.716	5.12	–	–	277	75	15.28	33.80	5.60	25.01	296	0.24
96	12.62	33.667	4.55	–	–	253	100	12.37	33.68	4.37	25.51	248	0.31
108	11.92	33.769	3.83	–	–	233	125	11.21	33.95	3.03	25.94	207	0.37
133	10.89	33.997	2.82	–	–	198	150	10.23	34.07	2.67	26.21	182	0.42
151	10.20	34.075	2.66	–	–	181	200	9.86	34.28	1.75	26.43	160	0.51
177	9.70	34.143	2.36	–	–	168	250	9.98	34.49	0.77	26.58	147	0.58
207	9.90	34.311	1.57	–	–	159	300	9.63	34.55	0.48	26.68	137	0.66
233	9.94	34.423	1.02	–	–	151	400	7.96	34.43	0.40	26.85	121	0.79
276	10.03	34.575	0.48	–	–	141	500	6.97	34.43	0.31	27.00	107	0.92
333	8.96	34.488	0.47	–	–	131	600	6.11	34.45	0.30	27.13	95	1.02
423	7.68	34.410	0.54	–	–	118	700	5.49	34.47	0.32	27.22	86	1.12
506	6.96	34.432	0.35	–	–	107	800	4.97	34.48	0.37	27.29	79	1.21
576	6.26	34.432	0.51u	–	–	98	1000	4.16	34.51	0.54	27.40	69	1.38
							1200	3.62	34.55	0.80	27.49	60	1.53
411a)	7.83	34.434	0.32	–	–	118	1500	2.88	34.60	1.20	27.60	50	1.72
488	7.06	34.432	0.22	–	–	108	2000	2.11	34.64	1.95	27.70	41	2.00
645	5.85	34.466	0.28	–	–	90	2500	1.79	34.67	2.38	27.75	36	2.24
848	4.74	34.489	0.40	–	–	76	3000	1.64	34.68	2.68	27.76	34	2.46
1055	3.98	34.520	0.60	–	–	66							
1268	3.45	34.561	0.92	–	–	58							
1483	2.92	34.596	1.18	–	–	51							
1701	2.46	34.616	1.53	–	–	45							
1920	2.18	34.638	1.88	–	–	41							
2141	2.00	34.653	2.12	–	–	39							
2362	1.86	34.664	2.30	–	–	37							
2584	1.76	34.669	2.45	–	–	36							
2807	1.66	34.676	2.62	–	–	35							
3033	1.64	34.684	2.70	–	–	34							
3263	1.62	34.684	2.74	–	–	34							

a) Overlapping casts; reconciliation of property curves when necessary.

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6304

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

130.60 ALEXANDER AGASSIZ; May 17, 1963; 1420 GCT; 25°30'N, 115°23.5'W; sounding, 2050 fm; wind, 340°, force 4; weather, cloudy; sea, rough; wire angle, 16°.

1	17.77	33.951	5.72	0.30	1	340	0	(17.77)	(33.95)	(5.72)	(24.54)	(340)	(0.00)
10	17.80	33.948	5.71	0.28	1	341	10	17.80	33.95	5.71	24.54	341	0.03
35	17.8	33.957	5.69	0.28	1	340	20	17.8	33.95	5.70	24.54	341	0.07
63	17.67	34.025	5.67	0.30	1	332	30	17.8	33.95	5.69	24.54	341	0.10
73	16.92	33.924	5.75	0.32	1	323	50	17.8	33.96	5.68	24.54	340	0.17
92	15.04	33.745	5.58	-	-	295	75	16.78	33.91	5.74	24.75	320	0.25
106	13.47	33.678	5.07	-	-	269	100	14.06	33.69	5.33	25.18	279	0.33
121	12.91	33.774	4.20	-	-	251	125	12.70	33.81	3.92	25.55	244	0.40
150	11.54	34.070	2.58	-	-	204	150	11.54	34.07	2.58	25.97	204	0.45
171	11.54	34.279	1.65	-	-	189	200	11.96	34.64	0.67	26.34	170	0.55
200	11.96	34.644	0.67	-	-	169	250	11.19	34.65	0.39	26.49	155	0.63
233	11.40	34.649	0.45	-	-	159	300	10.40	34.59	0.41	26.58	146	0.71
262	11.03	34.643	0.37	-	-	153	400	8.78	34.52	0.35	26.80	126	0.85
310	10.22	34.577	0.42	-	-	144	500	7.33	34.47	0.32	26.98	109	0.98
374	9.16	34.537	0.36	-	-	130	600	6.33	34.46	0.33	27.10	97	1.09
470	7.74	34.470	0.33	-	-	115							
557	6.71	34.470	0.30	-	-	101							
630	6.10	34.454	0.37	-	-	94							

130.70 ALEXANDER AGASSIZ; May 17, 1963; 0857, 0539 GCT; 25°09'N, 116°02'W; sounding, 2117 fm; wind, 310°, force 3; weather, overcast; sea, rough; wire angle, 20°, 25°.

1	18.62	34.196	5.74	0.32	1	342	0	(18.62)	(34.20)	(5.74)	(24.53)	(342)	(0.00)
11	18.64	34.193	5.58	0.32	0	343	10	18.64	34.19	5.60	24.51	343	0.03
34	18.7	34.195	5.65	0.32	1	344	20	18.7	34.19	5.60	24.50	344	0.07
62	18.30	34.115	5.59	0.32	0	340	30	18.7	34.19	5.64	24.50	344	0.10
72	18.10	34.084	5.73	0.34	1	338	50	18.5	34.16	5.62	24.53	342	0.17
90	17.47	34.016	5.60	-	-	328	75	18.03	34.08	5.72	24.58	337	0.26
104	15.72	33.841	5.51	-	-	302	100	16.34	33.90	5.56	24.84	312	0.34
117	14.54	33.792	5.04	-	-	281	125	13.90	33.79	4.66	25.29	269	0.41
145	12.66	33.828	3.83	-	-	242	150	12.48	33.85	3.68	25.62	237	0.48
163	12.06	33.944	3.23	-	-	223	200	10.48	34.05	2.53	26.15	188	0.58
190	10.66	34.004	2.69	-	-	194	250	10.68	34.48	0.96	26.45	159	0.67
221	10.34	34.164	2.03	-	-	177	300	9.48	34.45	0.85	26.63	142	0.75
248	10.71	34.485	0.98	-	-	159	400	8.40	34.46	0.39	26.81	125	0.89
294	9.55	34.447	0.86	-	-	143	500	7.30	34.46	0.26	26.97	109	1.02
354	8.92	34.461	0.69	-	-	132	600	6.26	34.49	0.38	27.14	94	1.13
447	7.74	34.452	0.29	-	-	116	700	5.45	34.46	0.32	27.22	86	1.22
533	6.98	34.465	0.36	-	-	105	800	4.88	34.47	0.36	27.29	79	1.32
607	6.20	34.489	0.39	-	-	93	1000	4.16	34.52	0.56	27.41	68	1.48
							1200	3.67	34.56	0.68	27.49	60	1.63
407a)	8.46	34.481	0.32	-	-	124	1500	2.93	34.59	1.18	27.59	51	1.82
500	7.41	34.473	0.23	-	-	110	2000	2.20	34.63	1.98	27.68	42	2.11
734	5.23	34.454	0.31	-	-	84	2500	1.80	34.66	2.57	27.74	37	2.35
972	4.23	34.514	0.52	-	-	69	3000	1.65	34.67	2.80	27.76	35	2.58
1211	3.64	34.563	0.69	-	-	60							
1451	3.04	34.588	1.07	-	-	52							
1693	2.62	34.609	1.48	-	-	47							
1933	2.29	34.630	1.93	-	-	43							
2177	1.99	34.646	2.09	-	-	39							
2418	1.84	34.660	2.48	-	-	37							
2658	1.75	34.664	2.64	-	-	36							
2900	1.66	34.673	2.73	-	-	35							
3141	1.62	34.674	2.91	-	-	35							
3382	1.60	34.678	2.92	-	-	34							
3623	1.59	34.680	3.07	-	-	34							
3864b)	1.61	34.684	3.52	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

b) Last bottle rested on the bottom; mud in water samples.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 17-16, 1963; 0028, 2215 GCT; 24°49.5'N, 116°39'W; sounding, 2150 fm; wind, 340°, force 3; weather, cloudy; sea, rough; wire angle, 17°, 25°.

130.80

1	19.00	34.200	5.49	0.33	2	351	0	(19.00)	(34.20)	(5.49)	(24.43)	(351)	(0.00)
11	18.96	34.200	5.53	0.31	1	350	10	18.97	34.20	5.53	24.44	350	0.04
32	18.9	34.204	5.59	0.32	1	348	20	18.9	34.20	5.59	24.46	349	0.07
61	18.41	34.224	5.61	-	-	335	30	18.9	34.20	5.59	24.46	349	0.10
70	18.35	34.227	5.82	-	-	333	50	18.5	34.21	5.60	24.56	338	0.17
85	18.05	34.198	5.53	-	-	329	75	18.30	34.22	5.79	24.62	333	0.26
99	17.10	34.066	5.50	-	-	316	100	16.97	34.05	5.47	24.81	315	0.34
113	14.96	33.865	4.78	-	-	285	125	13.65	33.80	4.49	25.35	263	0.41
138	12.70	33.781	4.25	-	-	246	150	12.05	33.81	3.90	25.68	232	0.48
157	11.72	33.867	3.56	-	-	222	200	10.44	34.15	2.29	26.23	179	0.58
187	10.92	34.131	2.26	-	-	189	250	9.74	34.31	1.53	26.48	156	0.67
215	10.01	34.165	2.32	-	-	171	300	9.04	34.38	1.10	26.65	140	0.74
244	9.81	34.296	1.62	-	-	158	400	7.74	34.40	0.50	26.86	120	0.88
293	9.15	34.373	1.16	-	-	142	500	6.82	34.40	0.38	26.99	107	1.00
346	8.40	34.387	0.76	-	-	130	600	6.14	34.41	0.37	27.09	98	1.11
427	7.47	34.401	0.53	-	-	116	700	5.73	34.47	0.37	27.19	89	1.21
510	6.68	34.414	0.43	-	-	105	800	5.28	34.49	0.37	27.26	82	1.31
593	6.10	34.416	0.47	-	-	97	1000	4.33	34.52	0.40	27.39	70	1.48
							1200	3.72	34.55	0.65	27.48	61	1.63
474a)	7.15	34.375	0.37	-	-	114	1500	3.03	34.58	1.04	27.57	53	1.83
569	6.42	34.402	0.30	-	-	102	2000	2.16	34.64	1.91	27.69	41	2.11
711	5.68	34.472	0.31	-	-	88	2500	1.82	34.66	2.44	27.74	37	2.36
950	4.53	34.510	0.37	-	-	72	3000	1.66	34.67	2.73	27.76	35	2.59
1188	3.74	34.545	0.63	-	-	62							
1426	3.20b)	34.575	0.96	-	-	55							
1664	2.71	34.604	1.34	-	-	48							
1902	2.28	34.627	1.80	-	-	43							
2142	2.02	34.647	2.08	-	-	39							
2380	1.86	34.655	2.38	-	-	38							
2620	1.78	34.664	2.50	-	-	36							
2861	1.68	34.666	2.70	-	-	36							
3101	1.64	34.669	2.75	-	-	35							
3342	1.60	34.675	2.87	-	-	34							
3583	1.59	34.679	2.92	-	-	34							
3826	1.62	34.680	2.99	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.
b) Mean value of 3.16 and 3.24°C.

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130.90

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; May 16, 1963; 1627, 1341 GCT; 24°30'N, 117°25'W; sounding, 2196 fm; wind, 330°, force 3; weather, cloudy; sea, rough; wire angle, 11°, 14°.

2	18.74	34.239	5.50	0.36	1	342	0	(18.74)	(34.24)	(5.50)	(24.53)	(342)	(0.00)
12	18.75	34.242	5.51	0.36	1	342	10	18.75	34.24	5.51	24.52	342	0.03
31	18.8	34.240	5.54	0.36	1	343	20	18.8	34.24	5.52	24.51	343	0.07
60	18.55	34.225	5.49	0.38	1	338	30	18.8	34.24	5.54	24.51	343	0.10
70	18.40	34.218	5.55	-	-	335	50	18.7	34.23	5.50	24.53	342	0.17
85	16.42	34.002	5.41	-	-	306	75	17.50	34.12	5.52	24.74	321	0.26
99	14.19	33.851	4.28	-	-	270	100	14.05	33.85	4.18	25.31	267	0.33
114	12.80	33.901	3.15	-	-	239	125	12.29	33.96	2.82	25.75	226	0.39
138	11.76	34.036	2.54	-	-	211	150	11.35	34.07	2.33	26.01	201	0.45
158	11.00	34.094	2.18	-	-	193	200	9.61	34.17	2.11	26.39	165	0.54
188	9.89	34.160	2.14	-	-	170	250	9.64	34.41	1.15	26.57	147	0.62
218	9.38	34.204	1.95	-	-	158	300	8.84	34.40	0.80	26.69	136	0.69
247	9.65	34.411	1.17	-	-	147	400	7.66	34.40	0.46	26.87	119	0.83
295	8.92	34.403	0.82	-	-	137	500	6.72	34.40	0.32	27.01	106	0.95
349	8.22	34.404	0.61	-	-	126	600	5.95	34.43	0.32	27.13	94	1.05
432	7.54	34.441	0.39	-	-	114	700	5.39	34.46	0.33	27.22	86	1.15
517	6.58	34.407	0.35	-	-	104	800	4.98	34.48	0.35	27.29	79	1.24
602	5.98	34.430	0.39	-	-	95	1000	4.17	34.53	0.38	27.42	67	1.41
							1200	3.59	34.56	0.75	27.50	59	1.55
396a)	7.52	34.365	0.49	-	-	119	1500	2.85	34.60	1.20	27.60	50	1.75
498	6.77	34.399	0.28	-	-	107	2000	2.10	34.64	1.98	27.70	41	2.02
593	5.94	34.430	0.24	-	-	94	2500	1.79	34.66	2.34	27.74	37	2.26
792	5.00	34.477	0.34	-	-	80	3000	1.64	34.68	2.73	27.76	34	2.49
1039	4.04	34.533	0.39	-	-	66	4000	(1.62)					
1284	3.38	34.568	0.96	-	-	57							
1532	2.79	34.600	1.25	-	-	49							
1778	2.40	34.627	1.65	-	-	44							
2023	2.08	34.642	2.00	-	-	40							
2268	1.90	34.652	2.27	-	-	38							
2513	1.78	34.663	2.35	-	-	37							
2757	1.72	34.669	2.65	-	-	36							
3001	1.64	34.682	2.73	-	-	34							
3248	1.60	34.682	2.90	-	-	34							
3496	1.58	34.687	2.93	-	-	33							
3746	1.58	34.690	2.98	-	-	33							
3996b)	1.62	-	-	-	-								

a) Overlapping casts; reconciliation of property curves when necessary.
b) Last bottle rested on the bottom; mud in water samples.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

ALEXANDER AGASSIZ; May 16, 1963; 0816, 0505 GCT; 24°09'N, 117°55'W; sounding, 2157 fm; wind, 360°, force 4; weather, cloudy; sea, rough; wire angle, 11°, 30°. 130.100

1	19.01	34.330	5.63	0.34	0	342	0	(19.01)	(34.33)	(5.63)	(24.53)	(342)	(0.00)
11	19.04	34.320	5.56	0.32	1	343	10	19.04	34.32	5.57	24.51	343	0.03
35	19.0	34.327	5.59	0.32	0	342	20	19.0	34.32	5.58	24.52	342	0.07
65	18.85	34.345	5.40	0.34	0	337	30	19.0	34.33	5.60	24.53	341	0.10
75	17.44	34.131	5.55	0.42	1	319	50	18.9	34.34	5.50	24.56	338	0.17
94	14.04	33.821	4.45	-	-	269	75	17.44	34.13	5.55	24.76	319	0.25
109	12.64	33.738	4.10	-	-	248	100	13.70	33.77	4.30	25.32	266	0.33
124	11.99	34.015	2.63	-	-	216	125	11.98	34.02	2.61	25.85	216	0.39
153	11.43	34.233	1.78	-	-	190	150	11.50	34.21	1.85	26.09	193	0.44
173	11.08	34.338	1.46	-	-	176	200	10.22	34.34	1.39	26.42	162	0.53
202	10.18	34.345	1.38	-	-	161	250	9.57	34.46	0.78	26.62	142	0.61
236	9.84	34.456	0.90	-	-	147	300	8.93	34.47	0.57	26.73	132	0.68
266	9.28	34.463	0.69	-	-	138	400	7.81	34.46	0.44	26.90	116	0.81
314	8.82	34.472	0.53	-	-	130	500	6.69	34.44	0.35	27.04	103	0.93
378	8.13	34.471	0.49	-	-	120	600	5.90	34.45	0.35	27.15	92	1.03
477	6.84	34.407	0.44	-	-	107	700	5.32	34.46	0.35	27.23	85	1.13
567	6.26	34.452	0.37	-	-	96	800	4.82	34.48	0.35	27.31	78	1.22
642	5.66	34.456	0.45	-	-	89	1000	4.09	34.52	0.70	27.42	67	1.38
							1200	3.51	34.55	0.85	27.50	59	1.53
353a)	8.32	34.464	0.47	-	-	123	1500	2.91	34.59	1.24	27.59	51	1.72
444	7.42	34.463	0.26	-	-	111	2000	2.13	34.64	2.00	27.69	41	2.00
626	5.72	34.449	0.29	-	-	90	2500	1.81	34.66	2.48	27.74	37	2.24
808	4.79	34.481	0.35	-	-	77	3000	1.63	34.68	2.79	27.77	34	2.47
1034	3.98	34.521	0.75	-	-	66							
1261	3.36	34.561	0.90	-	-	57							
1490	2.92	34.594	1.23	-	-	51							
1721	2.53	34.615	1.64	-	-	46							
1951	2.20	34.637	1.97	-	-	42							
2182	1.96	34.649	2.22	-	-	39							
2415	1.84	34.664	2.44	-	-	37							
2649	1.74	34.666	2.54	-	-	36							
2883	1.66	34.674	2.77	-	-	35							
3119	1.60	34.682	2.81	-	-	34							
3356	1.58	34.682	2.92	-	-	34							
3596	1.58	34.680	3.00	-	-	34							
3838	1.58	-	3.08	-	-								

ALEXANDER AGASSIZ; May 15, 1963; 2002 GCT; 23°33'N, 119°06'W; sounding, 2190 fm; wind, 030°, force 4; weather, cloudy; sea, rough; wire angle, 25°. 130.120

1	18.68	34.185	5.66	0.30	3	344	0	(18.68)	(34.18)	(5.66)	(24.50)	(345)	(0.00)
10	18.65	34.164	5.80	0.32	3	345	10	18.65	34.16	5.80	24.49	345	0.03
33	18.6	34.164	5.70	0.29	3	344	20	18.6	34.16	5.73	24.50	344	0.07
60	18.14	34.116	5.59	0.30	3	337	30	18.6	34.16	5.70	24.50	344	0.10
69	17.50	34.070	5.84	0.28	3	325	50	18.6	34.16	5.70	24.50	344	0.17
87	16.78	34.044	5.70	0.29	4	311	75	17.42	34.06	5.84	24.71	324	0.26
100	15.25	33.958	5.69	-	-	284	100	15.25	33.96	5.69	25.14	284	0.33
114	14.38	33.918	5.36	-	-	269	125	13.82	33.89	5.15	25.39	260	0.40
140	12.14	33.781	4.74	-	-	236	150	11.29	33.78	4.51	25.79	221	0.46
158	10.76	33.790	4.28	-	-	211	200	9.81	34.09	2.65	26.29	174	0.56
184	10.06	33.971	3.14	-	-	186	250	8.93	34.20	2.09	26.52	152	0.65
215	9.59	34.147	2.39	-	-	166	300	8.50	34.28	1.60	26.65	140	0.72
241	9.09	34.189	2.16	-	-	155	400	7.97	34.42	0.60	26.84	122	0.86
285	8.56	34.242	1.82	-	-	143	500	7.00	34.43	0.52	26.99	108	0.98
343	8.36	34.383	0.94	-	-	130	600	(6.08)	(34.44)	(0.45)	(27.12)	(95)	(1.09)
434	7.64	34.424	0.54	-	-	117							
518	6.82	34.430	0.52	-	-	105							
589	6.16	34.434	0.47	-	-	97							

a) Overlapping casts; reconciliation of property curves when necessary.

S10

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
137.23	ALEXANDER AGASSIZ; May 19, 1963; 1114 GCT; 25°34'N, 112°19'W; sounding, 38 fm; wind, 300°, force 3; weather, clear; sea, moderate; wire angle, 05°.												
1	16.70	33.975	6.06	0.52	9	314	0	(16.70)	(33.98)	(6.06)	(24.82)	(314)	(0.00)
11	16.72	33.957	6.11	0.57	9	316	10	16.72	33.96	6.10	24.80	316	0.03
31	13.8	34.074	2.66	-	-	246	20	15.5	33.97	4.72	25.09	288	0.06
51	13.12	34.250	1.02	-	-	220	30	13.8	34.06	2.70	25.52	247	0.09
61	12.82	34.297	0.62	-	-	211	50	13.1	34.25	1.07	25.81	219	0.14
137.30	ALEXANDER AGASSIZ; May 19, 1963; 1457 GCT; 25°21.5'N, 112°42'W; sounding, 168 fm; wind, 310°, force 4; weather, partly cloudy; sea, moderate; wire angle, 20°.												
1	16.39	33.890	5.76	0.58	4	313	0	(16.39)	(33.89)	(5.76)	(24.82)	(313)	(0.00)
11	16.40	33.888	5.73	0.60	4	314	10	16.40	33.89	5.73	24.82	314	0.03
29	16.1	33.898	5.46	0.66	4	306	20	16.4	33.89	5.70	24.82	314	0.06
47	13.99	33.864	3.31	-	-	265	30	16.1	33.90	5.40	24.90	306	0.09
70	12.78	33.998	2.85	-	-	232	50	13.77	33.88	3.20	25.39	260	0.15
93	12.24	34.224	1.65	-	-	205	75	12.55	34.04	2.60	25.76	225	0.21
116	12.18	34.427	0.85	-	-	189	100	12.00	34.28	1.17	26.05	197	0.26
153	11.66	34.590	0.44	-	-	168	125	12.12	34.49	0.68	26.19	184	0.31
191	11.06	34.626	0.32	-	-	155	150	11.73	34.59	0.46	26.34	169	0.36
239	10.73	34.619	0.31	-	-	150	200	10.98	34.63	0.32	26.51	153	0.44
137.40	ALEXANDER AGASSIZ; May 19, 1963; 2232, 2056 GCT; 25°00'N, 113°23.5'W; sounding, 1500 fm; wind, 280°, force 5; weather, partly cloudy; sea, rough; wire angle, 24°, 28°.												
1	18.23	33.982	5.85	0.40	1	348	0	(18.23)	(33.98)	(5.85)	(24.45)	(349)	(0.00)
10	18.16	33.977	5.87	0.41	2	347	10	18.16	33.98	5.87	24.47	347	0.03
28	17.1	33.962	6.08	0.48	3	324	20	17.7	33.97	6.00	24.58	337	0.07
37	15.75	33.912	5.74	-	-	298	30	16.6	33.95	6.03	24.82	314	0.10
51	14.96	33.957	4.95	-	-	278	50	15.09	33.95	5.06	25.16	281	0.16
65	13.64	33.874	4.31	-	-	258	75	12.59	33.89	3.60	25.63	236	0.23
87	11.54	33.963	2.72	-	-	212	100	11.11	34.06	2.20	26.04	197	0.28
106	11.28	34.144	2.12	-	-	194	125	10.81	34.19	1.93	26.20	183	0.33
124	10.82	34.189	1.95	-	-	183	150	10.68	34.26	1.38	26.28	175	0.37
141	10.68	34.203	1.39	-	-	180	200	10.37	34.46	1.05	26.49	155	0.46
168	10.68	34.407	1.36	-	-	164	250	9.93	34.51	0.58	26.60	145	0.54
199	10.37	34.455	1.06	-	-	156	300	9.38	34.53	0.45	26.71	134	0.61
226	10.22	34.506	0.72	-	-	150	400	8.18	34.48	0.39	26.86	120	0.74
271	9.63	34.508	0.68	-	-	140	500	6.96	34.43	0.37	27.00	107	0.86
320	9.21	34.530	0.43	-	-	132	600	6.21	34.45	0.33	27.11	96	0.97
398	8.18	34.465	0.50	-	-	121	700	5.59	34.46	0.30	27.20	88	1.07
478	7.16	34.430	0.38	-	-	110	800	5.12	34.47	0.29	27.26	82	1.17
556	6.50	34.434	0.39	-	-	101	1000	4.24	34.51	0.46	27.39	69	1.34
							1200	3.69	34.55	0.62	27.48	61	1.49
271a)	9.64	34.532	0.33	-	-	138	1500	3.11	34.59	0.98	27.57	53	1.69
359	8.79	34.530	0.21	-	-	125	2000	2.19	34.64	2.00	27.69	41	1.97
589	6.32	34.460	0.21	-	-	97	2500	(1.85)	(34.66)	(2.39)	(27.73)	(37)	(2.22)
821	5.02	34.477	0.29	-	-	80							
1057	4.06	34.521	0.54	-	-	67							
1294	3.48	34.564	0.71	-	-	58							
1533	3.04	34.597	1.05	-	-	52							
1773	2.58	34.619	1.43	-	-	46							
2014	2.18	34.641	2.07	-	-	41							
2253	1.98	34.649	2.19	-	-	39							
2494	1.86	34.659	2.39	-	-	37							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m
ALEXANDER AGASSIZ; May 20, 1963; 0352 GCT; 24°39'N, 114°01.5'W; sounding, 1900 fm; wind, 320°, force 5; weather, clear; sea, rough; wire angle, 19°.													137.50
2	17.62	33.944	5.74	0.34	2	337	0	(17.62)	(33.94)	(5.74)	(24.57)	(337)	(0.00)
11	17.68	33.943	5.74	0.34	1	338	10	17.68	33.94	5.74	24.56	339	0.03
35	17.5	33.929	5.84	0.34	1	335	20	17.7	33.94	5.74	24.55	339	0.07
63	15.66	33.838	5.56	-	-	301	30	17.7	33.94	5.75	24.55	339	0.10
73	14.77	33.770	5.30	-	-	288	50	16.0	33.85	5.64	24.88	308	0.17
91	12.89	33.708	4.59	-	-	255	75	14.57	33.76	5.20	25.13	284	0.24
105	11.36	33.698	4.47	-	-	228	100	12.52	33.71	4.53	25.51	248	0.31
121	12.12	34.128	2.30	-	-	210	125	12.03	34.17	2.19	25.96	206	0.37
150	11.14	34.220	1.85	-	-	186	150	11.14	34.22	1.85	26.16	186	0.42
169	11.02	34.356	1.35	-	-	174	200	10.63	34.47	0.88	26.45	159	0.50
198	10.66	34.464	0.91	-	-	160	250	10.15	34.55	0.47	26.59	145	0.58
231	10.39	34.550	0.53	-	-	149	300	9.42	34.50	0.51	26.68	137	0.66
260	10.00	34.546	0.46	-	-	143	400	8.06	34.47	0.38	26.87	119	0.79
308	9.31	34.492	0.52	-	-	136	500	7.12	34.46	0.35	27.00	107	0.91
371	8.38	34.469	0.38	-	-	124	600	6.26	34.45	0.35	27.11	97	1.02
467	7.41	34.459	0.39	-	-	111							
556	6.66	34.454	0.29	-	-	101							
629	6.01	34.452	0.39	-	-	93							
ALEXANDER AGASSIZ; May 20, 1963; 1205, 0938 GCT; 24°20'N, 114°39.5'W; sounding, 2033 fm; wind, 320°, force 3; weather, missing; sea, moderate; wire angle, 27°, 28°.													137.60
1	17.66	33.926	5.80	0.30	1	339	0	(17.66)	(33.93)	(5.80)	(24.56)	(339)	(0.00)
10	17.70	33.928	5.78	0.30	2	340	10	17.70	33.93	5.78	24.55	340	0.03
32	17.6	33.924	5.83	0.28	2	338	20	17.7	33.93	5.80	24.55	340	0.07
59	17.02	33.948	5.63	0.32	2	323	30	17.6	33.92	5.82	24.56	338	0.10
69	16.41	33.901	5.72	0.36	2	313	50	17.4	33.95	5.73	24.63	332	0.17
86	15.22	33.826	5.33	-	-	293	75	16.02	33.87	5.66	24.89	307	0.25
99	13.88	33.814	4.48	-	-	267	100	13.88	33.81	4.47	25.31	267	0.32
111	12.74	33.799	3.87	-	-	246	125	12.42	34.06	2.75	25.80	221	0.38
135	12.16	34.166	2.11	-	-	208	150	11.19	34.17	2.27	26.11	191	0.44
152	11.18	34.166	2.28	-	-	191	200	10.69	34.41	1.28	26.39	164	0.53
176	11.40	34.385	1.33	-	-	178	250	10.26	34.51	0.87	26.54	150	0.61
205	10.61	34.415	1.28	-	-	163	300	9.72	34.53	0.67	26.65	140	0.68
230	10.44	34.477	0.97	-	-	155	400	8.68	34.53	0.41	26.82	124	0.82
271	10.04	34.532	0.81	-	-	145	500	7.52	34.49	0.38	26.96	110	0.95
327	9.42	34.532	0.52	-	-	135	600	6.27	34.46	0.30	27.11	96	1.06
415	8.54	34.532	0.39	-	-	121	700	5.63	34.47	0.26	27.20	88	1.16
496	7.59	34.492	0.39	-	-	111	800	5.11	34.48	0.30	27.27	81	1.25
563	6.64	34.468	0.43	-	-	100	1000	4.30	34.52	0.47	27.39	69	1.42
							1200	3.69	34.55	0.74	27.48	61	1.57
545a)	6.82	34.465	0.24	-	-	103	1500	3.04	34.59	1.23	27.58	52	1.77
682	5.73	34.465	0.26	-	-	89	2000	2.18	34.64		27.69	41	2.05
823	4.99	34.488	0.31	-	-	79	2500	1.81	34.66		27.74	37	2.30
1009	4.28	34.526	0.48	-	-	69	3000	1.66	34.67		27.76	35	2.53
1243	3.58	34.559	0.79	-	-	59							
1477	3.09	34.590	1.21	-	-	53							
1712	2.65	34.611	1.51	-	-	47							
1948	2.24	34.642	2.01	-	-	42							
2183	2.00	34.646	2.39	-	-	39							
2418	1.86	34.660	2.47	-	-	37							
2652	1.76	34.664	2.76	-	-	36							
2885	1.68	34.672	2.69	-	-	35							
3119	1.64	34.674	2.88	-	-	35							
3359	1.62	34.678	3.05	-	-	34							
3603	1.64	34.678	2.95	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

SIO

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6304

137.70

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z m	T °C	S ‰	O_2 ml/L	PO_4-P µg at/L	SiO_3-Si µg at/L	δ_T cl/ton	Z m	T °C	S ‰	O_2 ml/L	σ_t g/L	δ_T cl/ton	ΔD dyn m

ALEXANDER AGASSIZ; May 20, 1963; 1933, 1710 GCT; 23°59.5'N, 115°18'W; sounding, 2065 fm; wind, 010°, force 3; weather, cloudy; sea, rough; wire angle, 28°, 47°.

2	18.37	34.089	5.62	0.28	1	344	0	(18.37)	(34.09)	(5.62)	(24.50)	(344)	(0.00)
10	18.32	34.083	5.65	0.30	1	343	10	18.32	34.08	5.65	24.51	343	0.03
31	18.2	34.075	5.63	0.30	2	341	20	18.3	34.08	5.64	24.51	343	0.07
56	17.32	33.983	5.60	-	-	327	30	18.2	34.08	5.63	24.54	341	0.10
64	16.94	33.939	5.63	-	-	322	50	17.5	34.00	5.61	24.65	330	0.17
82	15.28	33.803	5.30	-	-	296	75	16.00	33.85	5.49	24.88	308	0.25
94	13.96	33.754	4.78	-	-	273	100	13.30	33.74	4.40	25.38	261	0.32
106	13.14	33.743	4.38	-	-	257	125	11.91	33.81	3.84	25.70	230	0.38
132	11.54	33.849	3.65	-	-	220	150	10.97	33.94	3.09	25.98	204	0.44
150	10.97	33.939	3.09	-	-	204	200	11.17	34.42	1.38	26.31	172	0.54
175	11.30	34.242	1.91	-	-	187	250	9.27	34.23	1.82	26.49	155	0.62
206	11.05	34.427	1.37	-	-	169	300	8.85	34.33	1.25	26.64	141	0.70
232	9.64	34.225	1.90	-	-	161	400	8.19	34.46	0.47	26.84	122	0.83
274	8.98	34.267	1.56	-	-	148	500	7.18	34.45	0.22	26.98	108	0.96
332	8.71	34.387	0.88	-	-	135	600	6.26	34.46		27.11	96	1.07
420	8.04	34.462	0.47	-	-	119	700	5.62	34.47	0.35	27.20	87	1.17
501	7.17	34.445	0.22	-	-	109	800	5.12	34.48	0.37	27.27	81	1.26
569	6.48	34.452	0.55u	-	-	99	1000	4.34	34.52	0.40	27.39	70	1.43
							1200	3.74	34.56	0.64	27.48	61	1.58
421a)	7.96	34.472	0.34	-	-	117	1500	3.02	34.59	1.03	27.58	52	1.78
568	6.65	34.461	0.03u	-	-	101	2000	2.18	34.64	2.10	27.69	41	2.06
759	5.31	34.472	0.37	-	-	84	2500	1.83	34.67	2.52	27.74	36	2.30
953	4.50	34.510	0.34	-	-	72	3000	1.65	34.67	2.90	27.76	35	2.53
1150	3.88	34.550	0.58	-	-	63							
1349	3.36	34.578	0.84	-	-	56							
1554	2.90	34.589	1.09	-	-	51							
1762	2.52	34.617	1.58	-	-	46							
1975	2.20	34.640	2.05	-	-	41							
2191	2.00	34.651	2.24	-	-	39							
2407	1.86	34.669	2.51	-	-	37							
2625	1.79	34.672	2.52	-	-	36							
2844	1.68	34.673	2.65	-	-	35							
3069	1.64	34.674	3.00	-	-	35							
3256	1.62	34.678	2.93	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m
ALEXANDER AGASSIZ; May 21, 1963; 0232, 0013 GCT; 23°40'N, 115°55'W; sounding, 2116 fm; wind, 340°, force 3; weather, cloudy; sea, moderate; wire angle, 12°, 32°.													137.80
1	19.49	34.278	5.55	0.17	0	357	0	(19.49)	(34.28)	(5.55)	(24.37)	(357)	(0.00)
10	19.51	34.279	5.49	0.20	0	358	10	19.51	34.28	5.49	24.36	358	0.04
34	19.5	34.282	5.57	0.23	0	357	20	19.5	34.28	5.54	24.36	357	0.07
63	18.70	34.161	5.50	-	-	347	30	19.5	34.28	5.56	24.36	357	0.11
73	18.56	34.162	5.64	-	-	343	50	18.9	34.18	5.52	24.44	350	0.18
92	17.49	34.012	5.56	-	-	329	75	18.50	34.16	5.63	24.53	342	0.27
107	15.82	33.885	5.28	-	-	301	100	16.88	33.95	5.48	24.76	320	0.35
121	14.46	33.807	4.73	-	-	279	125	13.90	33.81	4.45	25.31	267	0.42
150	12.14	33.863	3.69	-	-	230	150	12.14	33.86	3.69	25.70	230	0.49
170	11.72	34.059	2.64	-	-	208	200	10.69	34.12	2.38	26.17	186	0.59
199	10.72	34.119	2.38	-	-	186	250	9.56	34.25	1.89	26.46	158	0.68
232	9.84	34.172	2.32	-	-	168	300	9.76	34.50	0.72	26.62	143	0.76
261	9.50	34.307	1.51	-	-	153	400	8.49	34.50	0.34	26.83	123	0.90
309	9.62	34.503	0.67	-	-	140	500	7.33	34.47	0.29	26.98	109	1.02
371	8.78	34.502	0.45	-	-	127	600	6.42	34.48	0.43	27.11	96	1.13
467	7.63	34.481	0.29	-	-	112	700	5.73	34.50	0.36	27.21	86	1.23
556	6.62	34.452	0.57	-	-	101	800	5.18	34.51	0.35	27.29	79	1.32
629	6.22	34.489	0.39	-	-	93	1000	4.27	34.52	0.40	27.40	69	1.49
							1200	3.65	34.55	0.63	27.49	61	1.64
308a)	9.96	34.550	0.37	-	-	142	1500	2.98	34.59	1.13	27.58	52	1.84
486	7.81	34.470	0.24	-	-	116	2000	2.19	34.64	1.85	27.69	41	2.12
713	5.76	34.480	0.18	-	-	88	2500	1.79	34.66		27.74	37	2.36
941	4.49	34.516	0.35	-	-	72	3000	1.65	34.67		27.76	35	2.59
1170	3.74	34.548	0.60	-	-	62							
1400	3.16	34.579	0.93	-	-	54							
1631	2.76	34.606	1.37	-	-	48							
1863	2.40	34.626	1.66	-	-	44							
2092	2.06	34.643	1.99	-	-	40							
2326	1.88	34.659	2.30	-	-	38							
2561	1.77	34.662	2.51	-	-	37							
2796	1.70	34.669	2.63	-	-	35							
3032	1.64	34.675	2.76	-	-	35							
3268	1.62	34.678	2.78	-	-	34							
3504	1.61	34.673	2.93	-	-	35							
3743	1.63	34.675	2.89	-	-	35							
ALEXANDER AGASSIZ; May 22, 1963; 0709 GCT; 24°45.5'N, 112°24'W; sounding, 57 fm; wind, 320°, force 4; weather, clear; sea, moderate; wire angle, 10°.													140.30
1	17.84	34.087	6.09	0.38	7	332	0	(17.84)	(34.09)	(6.09)	(24.63)	(331)	(0.00)
11	17.88	34.085	6.07	0.40	6	333	10	17.88	34.08	6.07	24.62	333	0.03
21	14.6	33.970	4.26	-	-	270	20	14.7	33.97	4.35	25.26	272	0.06
40	13.31	34.109	2.24	-	-	234	30	13.6	34.05	2.74	25.56	244	0.09
65	12.43	34.215	1.54	-	-	209	50	13.23	34.15	2.10	25.71	229	0.14
90	12.20	34.418	1.07	-	-	190	75	12.32	34.30	1.30	26.00	201	0.19

a) Overlapping casts; reconciliation of property curves when necessary.

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OBSERVED						COMPUTED	INTERPOLATED				COMPUTED		
Z	T	S	O_2	PO_4-P	SiO_3-Si	δ_T	Z	T	S	O_2	σ_t	δ_T	ΔD
m	°C	‰	ml/L	µg at/L	µg at/L	cl/ton	m	°C	‰	ml/L	g/L	cl/ton	dyn m

140.40 ALEXANDER AGASSIZ; May 22, 1963; 0133 GCT; 24°27'N, 113°02.5'W; sounding, 1795 fm; wind, 330°, force 5; weather, partly cloudy; sea, rough; wire angle, 34°.

1	19.60	34.320	5.32	0.32	0	357	0	(19.60)	(34.32)	(5.32)	(24.37)	(357)	(0.00)
9	19.62	34.315	5.32	0.32	1	358	10	19.6	34.32	5.32	24.37	357	0.04
30	19.6	34.316	5.34	0.34	1	357	20	19.6	34.32	5.33	24.37	357	0.07
56	17.19	34.088	5.50	-	-	317	30	19.6	34.32	5.34	24.37	357	0.11
63	15.76	33.975	4.67	-	-	293	50	18.3	34.20	5.49	24.61	334	0.18
79	14.50	33.934	3.75	-	-	270	75	14.85	33.94	4.02	25.21	277	0.25
90	13.40	33.972	2.96	-	-	246	100	12.97	33.99	2.83	25.64	236	0.32
101	12.96	33.988	2.82	-	-	236	125	12.13	34.23	1.67	25.99	203	0.37
122	12.20	34.200	1.78	-	-	206	150	11.67	34.41	1.03	26.21	181	0.42
138	11.90	34.334	1.30	-	-	191	200	11.42	34.64	0.34	26.44	160	0.51
158	11.59	34.465	0.85	-	-	176	250	10.77	34.65	0.22	26.56	148	0.59
183	11.66	34.635	0.28	-	-	165	300	9.85	34.60	0.20	26.68	137	0.66
204	11.37	34.637	0.35	-	-	159	400	8.78	34.55	0.15	26.82	124	0.80
241	10.96	34.649	0.22	-	-	151	500	7.58	34.51	0.15	26.97	109	0.93
291	9.95	34.604	0.21	-	-	138							
373	9.10	34.559	0.15	-	-	128							
453	8.16	34.526	0.16	-	-	116							
523	7.28	34.504	0.15	-	-	106							

140.50 ALEXANDER AGASSIZ; May 21, 1963; 1830, 1629 GCT; 24°07'N, 113°39.5'W; sounding, 1769 fm; wind, 360°, force 4; weather, cloudy; sea, moderate; wire angle, 20°, 28°.

2	19.62	34.320	5.58	0.34	1	357	0	(19.62)	(34.32)	(5.58)	(24.36)	(357)	(0.00)
11	19.60	34.314	5.57	0.34	1	357	10	19.60	34.32	5.57	24.37	357	0.04
30	19.6	34.318	5.55	0.33	1	357	20	19.6	34.32	5.56	24.37	357	0.07
39	19.00	34.244	5.51	-	-	348	30	19.6	34.32	5.55	24.37	357	0.11
53	17.85	34.098	5.72	-	-	331	50	18.11	34.13	5.68	24.60	335	0.18
68	16.37	33.938	5.63	-	-	309	75	15.35	33.89	5.11	25.06	291	0.26
92	13.80	33.912	3.76	-	-	258	100	13.26	33.97	3.17	25.56	243	0.32
111	12.74	34.045	2.56	-	-	228	125	12.52	34.26	1.45	25.93	208	0.38
129	12.44	34.318	1.30	-	-	202	150	11.65	34.39	1.24	26.20	182	0.43
147	11.71	34.375	1.28	-	-	185	200	11.08	34.55	0.75	26.43	161	0.52
175	11.35	34.538	0.78	-	-	166	250	10.44	34.58	0.53	26.57	148	0.60
207	11.00	34.558	0.72	-	-	159	300	9.62	34.54	0.50	26.68	137	0.67
234	10.68	34.589	0.56	-	-	151	400	8.32	34.47	0.50	26.83	123	0.81
280	9.95	34.559	0.51	-	-	141	500	7.14	34.46	0.27	27.00	107	0.93
331	9.13	34.494	0.47	-	-	133	600	6.42	34.46	0.26	27.09	98	1.04
410	8.20	34.469	0.50	-	-	121	700	5.71	34.47	0.21	27.19	88	1.14
492	7.24	34.461	0.34	-	-	108	800	5.22	34.49	0.21	27.27	81	1.24
580	6.56	34.461	0.41	-	-	100	1000	4.41	34.53	0.35	27.39	70	1.41
							1200	3.77	34.55	0.58	27.47	62	1.56
492a)	7.17	34.459	0.13	-	-	108	1500	3.03	34.60	1.02	27.59	51	1.76
585	6.52	34.459	0.15	-	-	99	2000	2.21	34.64	1.87	27.69	41	2.04
725	5.57	34.470	0.19	-	-	87	2500	1.83	34.67	2.37	27.74	36	2.28
960	4.55	34.526	0.31	-	-	71	3000	1.66	34.68	2.70	27.76	34	2.51
1195	3.79	34.552	0.57	-	-	62							
1426	3.21	34.586	0.92	-	-	54							
1666	2.68	34.619	1.33	-	-	47							
1904	2.32	34.632	1.73	-	-	43							
2141	2.05	34.646	2.09	-	-	40							
2379	1.90	34.660	2.25	-	-	38							
2619	1.77	34.672	2.56	-	-	36							
2861	1.70	34.669	2.70	-	-	35							
3103	1.62	34.676	2.70	-	-	34							

a) Overlapping casts; reconciliation of property curves when necessary.

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
60.49-G	IV-23	0020	37°59.0'	122°50.0'	13	310°	4	partly cloudy	moderate	12.81	32.269
60.50-G	23	0040	37°57.5'	122°53.0'	24	310°	4	partly cloudy	moderate	11.50	33.085
60.51-G	23	0140	37°55.5'	122°57.5'	33	320°	5	partly cloudy	moderate	11.32	33.051
60.55-G	23	0500	37°47.5'	123°15.0'	72	330°	5	clear	moderate	11.96	32.805
63.50-G	20	1535	37°22.5'	122°28.5'	15	220°	3	rain	moderate	12.36	33.056
63.50-G	20	1625	37°23.5'	122°26.0'	15	230°	3	rain	moderate	12.19	32.783
63.51-G	20	1440	37°20.5'	122°32.0'	35	200°	4	cloudy	rough	12.38	31.449
67.47-G	19	1300	36°54.5'	121°52.0'	10	310°	2	partly cloudy	moderate	12.72	33.179
67.48-G	19	1340	36°53.0'	121°56.0'	16	300°	3	partly cloudy	moderate	12.34	33.266
67.49-G	19	1430	36°51.0'	122°00.5'	45	290°	3	rain	rough	12.60	33.258
70.50-G	19	0735	36°11.5'	121°44.0'	120	120°	3	rain	calm	10.52	33.629
70.51-G	19	0645	36°10.5'	121°46.0'	205	090°	3	rain	calm	10.98	33.538
70.52-G	19	0600	36°08.5'	121°50.0'	340	100°	3	rain	calm	12.64	33.358
73.49-G	11	0423	35°38.0'	121°15.5'	31	080°	2	clear	slight	10.43	33.675
73.50-G	11	0509	35°37.0'	121°17.5'	55	100°	2	clear	moderate	12.40	33.378
73.51-G	11	0557	35°35.5'	121°21.0'	188	090°	2	clear	moderate	13.98	33.176
77.48-G	12	0304	35°08.0'	120°43.5'	15	080°	2	partly cloudy	slight	11.37	33.775
77.48-G	12	0353	35°09.0'	120°42.0'	7	120°	2	missing	slight	11.73	33.783
77.49-G	12	0205	35°06.0'	120°48.0'	35	180°	1	clear	slight	10.68	33.689

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TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
77.50-G	IV-12	0135	35°04.0'	120°52.0'	70	200°	2	clear	moderate	11.42	33.536
80.50-G	12	0858	34°28.0'	120°29.5'	18	110°	2	clear	slight	11.3	33.844
80.51-G	12	1010	34°27.0'	120°31.0'	36	100°	1	clear	slight	11.7	33.821
80.65-G	14	0655	33°59.0'	121°29.5'	1840	160°	4	missing	moderate	14.83	33.103
82.47-B	12	2028	34°15.0'	119°58.0'	135	230°	1	partly cloudy	slight	11.84	33.808
83.39-B	12	1600	34°15.5'	119°17.5'	8	330°	2	partly cloudy	moderate	12.41	33.828
83.40-B	12	1645	34°14.0'	119°22.0'	12	330°	2	partly cloudy	moderate	12.36	33.800
83.43-B	12	1805	34°08.0'	119°34.0'	135	330°	1	partly cloudy	moderate	11.53	33.831
83.51-B	13	0120	33°52.0'	120°08.5'	100	220°	3	clear	moderate	12.57	33.697
83.55-B	13	0300	33°44.0'	120°24.5'	550	240°	3	partly cloudy	moderate	12.47	33.671
83.60-B	13	0545	33°34.0'	120°45.0'	750	240°	2	partly cloudy	moderate	13.52	33.436
83.65-B	13	0822	33°24.0'	121°06.0'	1900	240°	2	partly cloudy	moderate	14.64	33.253
83.70-B	13	1052	33°14.5'	121°26.0'	2000	240°	2	partly cloudy	moderate	14.98	33.396
83.80-B	13	1520	32°54.0'	122°04.0'	2000	220°	3	partly cloudy	rough	15.22	33.452
83.90-B	13	2035	32°34.5'	122°48.0'	2000	200°	4	partly cloudy	very rough	15.34	33.517
87.32-B	15	0510	33°54.0'	118°26.5'	8	240°	3	partly cloudy	rough	14.44	33.658
87.33-B	15	0445	33°54.0'	118°29.5'	25	240°	3	partly cloudy	rough	14.12	33.652
87.34-B	15	0343	33°52.0'	118°33.0'	37	240°	3	partly cloudy	rough	15.00	33.629
87.35-B	15	0250	33°50.0'	118°37.5'	250	240°	3	partly cloudy	rough	14.35	33.637

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
87.40-B	IV-15	0035	33°40.0'	118°58.0'	475	240°	4	partly cloudy	rough	13.31	33.691
87.45-B	14	2215	33°30.0'	119°19.0'	917	190°	3	partly cloudy	rough	13.45	33.678
87.50-B	14	1930	33°20.0'	119°39.5'	40	240°	2	cloudy	rough	13.38	33.650
87.55-B	14	1720	33°10.0'	120°00.0'	640	240°	4	cloudy	very rough	14.35	33.580
87.60-B	14	1445	33°00.0'	120°21.5'	350	220°	4	cloudy	very rough	13.31	33.331
87.65-B	14	1300	32°49.5'	120°42.0'	2050	160°	4	drizzle	very rough	13.91	33.328
87.70-B	14	1025	32°39.0'	121°02.0'	2100	140°	5	showers	very rough	14.91	33.312
87.80-B	14	0555	32°20.0'	121°43.0'	2200	180°	5	partly cloudy	very rough	15.69	33.458
87.90-B	14	0120	31°59.0'	122°24.0'	2000	190°	5	partly cloudy	very rough	15.32	33.445
90.28-G	V-2	2205	33°29.5'	117°45.0'	15	240°	2	clear	slight	14.26	33.665
90.65-G	1	2137	32°15.0'	120°17.5'	2020	330°	5	cloudy	high	14.18	33.447
93.26-B	IV-15	1630	32°57.0'	117°16.5'	20	280°	4	partly cloudy	rough	14.00	33.660
93.27-B	15	1415	32°56.0'	117°19.0'	80	280°	4	cloudy	rough	14.12	33.648
93.35-B	16	0207	32°40.5'	117°51.5'	350	300°	5	cloudy	very rough	14.84	33.662
93.45-B	16	1010	32°20.0'	118°32.0'	900	240°	7	squalls	precipitous	14.10	33.592
93.50-B	16	1215	32°10.0'	118°53.5'	800	320°	7	squalls	precipitous	14.64	33.569
93.55-B	16	1516	32°00.0'	119°13.0'	750	320°	6	squalls	precipitous	14.84	33.532
93.60-B	16	1810	31°53.5'	119°36.5'	1400	320°	6	cloudy	high	15.10	33.613
93.65-B	16	2025	31°43.0'	119°55.0'	2100	280°	6	partly cloudy	high	14.70	33.553

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
93.90-B	IV-17	1045	30°54.0'	121°35.5'	2200	270°	7	partly cloudy	high	16.02	33.421
97.29-B	20	0210	32°19.5'	117°04.0'	8	320°	3	partly cloudy	moderate	12.41	33.813
97.29-B	20	0250	32°17.0'	117°05.0'	30	320°	3	partly cloudy	moderate	12.18	33.759
97.30-B	20	0320	32°15.0'	117°08.5'	33	320°	3	partly cloudy	moderate	14.00	33.659
97.32-B	18	2200	32°12.0'	117°15.0'	580	320°	2	partly cloudy	rough	14.91	33.616
97.35-B	18	2010	32°05.5'	117°27.5'	700	320°	3	cloudy	rough	15.14	33.625
97.40-B	18	1730	31°57.0'	117°50.0'	700	320°	3	partly cloudy	rough	14.88	33.651
97.45-B	18	1445	31°49.0'	118°13.0'	800	320°	4	partly cloudy	rough	14.49	33.620
97.50-B	18	1133	31°37.0'	118°33.0'	1200	320°	3	partly cloudy	very rough	14.84	33.615
97.55-B	18	0910	31°26.0'	118°52.0'	680	320°	4	missing	very rough	15.42	33.561
97.60-B	18	0630	31°16.0'	119°10.5'	1900	320°	4	missing	very rough	15.47	33.493
97.65-B	18	0340	31°03.0'	119°32.0'	1920	320°	4	missing	very rough	15.17	33.687
97.70-B	18	0055	30°53.5'	119°51.0'	1950	330°	6	partly cloudy	high	15.56	33.651
97.80-B	17	1955	30°35.0'	120°31.0'	2000	330°	6	partly cloudy	high	15.80	33.416
97.90-B	17	1605	30°17.0'	121°09.0'	2000	320°	6	partly cloudy	high	16.42	33.588
100.29-G	V-5	0215	31°42.5'	116°42.5'	40	320°	4	partly cloudy	slight	13.10	33.770
100.45-G	5	1610	31°09.0'	117°46.0'	1000+	330°	4	partly cloudy	rough	12.98	33.598
100.55-G	5	2155	30°49.0'	118°25.0'	1310	340°	5	partly cloudy	rough	15.76	33.555
100.65-G	6	0408	30°26.0'	119°05.0'	2030	320°	6	missing	rough	15.82	33.603

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
103.28-B	IV-20	1258	31°08.0'	116°19.0'	9	090°	2	partly cloudy	slight	11.25	33.915
103.29-B	20	1218	31°07.0'	116°21.0'	15	090°	2	partly cloudy	slight	11.34	33.921
103.30-B	20	1130	31°05.0'	116°25.0'	35	calm		partly cloudy	moderate	11.80	33.774
103.35-B	20	1615	30°55.0'	116°45.0'	700	290°	3	partly cloudy	moderate	13.09	33.692
103.40-B	20	1845	30°44.5'	117°06.0'	1040	320°	4	partly cloudy	moderate	15.64	33.579
103.45-B	20	2107	30°35.0'	117°25.0'	1200	300°	4	partly cloudy	moderate	15.67	33.500
103.50-B	20	2325	30°26.0'	117°44.5'	1300	300°	3	partly cloudy	moderate	15.97	33.480
103.55-B	21	0200	30°16.0'	118°05.0'	1300	300°	4	cloudy	rough	16.10	33.503
103.60-B	21	0430	30°06.0'	118°25.0'	1920	320°	5	missing	rough	16.45	33.581
103.65-B	21	0720	29°57.0'	118°44.0'	1950	270°	5	missing	rough	16.42	33.677
103.70-B	21	0950	29°48.0'	119°03.0'	1800	270°	5	missing	very rough	16.46	33.601
103.80-B	21	1425	29°28.5'	119°40.5'	2000	320°	5	cloudy	very rough	16.32	33.585
103.90-B	21	1910	29°06.0'	120°25.0'	2000	340°	5	cloudy	very rough	16.24	33.553
107.30-B	23	1035	30°30.0'	116°03.5'	8	320°	2	missing	rough	10.79	33.971
107.31-B	23	0855	30°28.0'	116°07.0'	24	320°	2	missing	rough	11.68	33.895
107.32-B	23	0801	30°26.0'	116°11.0'	360	320°	2	missing	rough	11.76	33.910
107.35-B	23	0555	30°21.5'	116°22.5'	900	320°	4	missing	rough	15.36	33.653
107.40-B	23	0300	30°10.0'	116°43.0'	1450	330°	5	partly cloudy	rough	15.96	33.717
107.45-B	23	0015	29°59.5'	117°03.0'	1000	340°	5	partly cloudy	rough	15.74	33.633

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TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
107.50-B	IV-22	2150	29°50.5'	117°22.0'	1400	320°	4	partly cloudy	rough	15.35	33.567
107.55-B	22	1855	29°42.0'	117°43.0'	1600	340°	4	partly cloudy	rough	15.62	33.490
107.60-B	22	1615	29°31.0'	118°01.5'	1810	340°	5	partly cloudy	very rough	15.82	33.520
107.65-B	22	1315	29°21.0'	118°21.0'	1400	350°	5	partly cloudy	very rough	15.74	33.531
107.70-B	22	1025	29°11.0'	118°41.0'	1600	350°	6	missing	very rough	16.01	33.636
107.80-B	22	0435	28°52.5'	119°22.0'	2000	360°	5	missing	very rough	15.98	33.505
107.90-B	21	2350	28°33.0'	119°58.5'	2000	340°	5	partly cloudy	very rough	16.38	33.650
110.32-G	V-11	0300	29°52.0'	115°48.0'	12	330°	5	partly cloudy	rough	12.54	33.684
110.32-G	24	2030	29°52.0'	115°48.0'	12	-	-	missing	missing	13.97	33.730
110.45-G	10	1625	29°24.5'	116°39.0'	1000	320°	5	partly cloudy	rough	16.22	33.649
110.55-G	10	0848	29°06.0'	117°20.0'	1900	340°	5	partly cloudy	moderate	16.20	33.586
110.65-G	10	0310	28°46.0'	117°58.0'	1920	360°	4	cloudy	moderate	16.56	33.527
113.28-B	IV-23	2018	29°25.0'	115°11.5'	8	290°	3	partly cloudy	moderate	12.23	34.073
113.29-B	23	1935	29°24.0'	115°13.0'	14	290°	3	partly cloudy	moderate	12.29	34.009
113.30-B	23	2140	29°22.0'	115°18.5'	38	290°	5	partly cloudy	moderate	12.09	33.959
113.35-B	24	0035	29°11.5'	115°38.0'	700	320°	4	partly cloudy	rough	15.56	33.678
113.40-B	24	0310	29°00.5'	115°56.0'	975	320°	5	partly cloudy	rough	15.92	33.678
113.45-B	24	0542	28°50.0'	116°17.5'	1200	320°	4	partly cloudy	rough	15.56	33.584
113.50-B	24	0805	28°41.0'	116°36.5'	1900	300°	4	partly cloudy	rough	16.24	33.667

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
113.55-B	IV-24	1040	28°32.0'	116°57.0'	1900	300°	4	missing	rough	16.50	33.705
113.60-B	24	1315	28°22.5'	117°16.0'	2000	330°	4	partly cloudy	rough	16.64	33.743
113.65-B	24	1605	28°13.0'	117°37.0'	2000	340°	4	partly cloudy	rough	16.42	33.699
113.70-B	24	1823	28°02.0'	117°56.0'	2100	340°	4	partly cloudy	moderate	16.60	33.779
113.80-B	24	2240	27°42.0'	118°33.5'	2000	320°	3	partly cloudy	moderate	16.91	33.795
113.90-B	25	0315	27°22.5'	119°12.0'	2000	330°	3	cloudy	moderate	17.67	33.999
117.25-B	26	1945	28°58.0'	114°37.0'	30	320°	3	partly cloudy	slight	14.09	33.892
117.25-B	26	2002	28°58.5'	114°36.5'	10	320°	3	partly cloudy	slight	13.42	33.900
117.26-B	26	1906	28°56.0'	114°41.5'	40	320°	2	partly cloudy	slight	14.54	33.875
117.30-B	26	1705	28°48.0'	114°56.5'	55	280°	2	partly cloudy	slight	12.50	33.710
117.35-B	26	1450	28°38.0'	115°16.0'	110	300°	3	partly cloudy	moderate	13.27	33.670
117.40-B	26	0950	28°28.0'	115°35.5'	450	270°	3	missing	moderate	14.98	33.660
117.45-B	26	0710	28°18.0'	115°56.0'	1750	290°	3	missing	moderate	16.12	33.691
117.50-B	26	0450	28°10.5'	116°16.5'	2500	340°	3	cloudy	moderate	16.53	33.707
117.55-B	26	0200	27°58.5'	116°36.0'	2350	330°	3	cloudy	moderate	16.58	33.692
117.60-B	25	2310	27°47.5'	116°54.5'	1900	340°	2	cloudy	moderate	16.84	33.754
117.65-B	25	2020	27°38.0'	117°13.0'	2000	320°	3	cloudy	moderate	16.24	33.675
117.70-B	25	1710	27°25.0'	117°37.5'	2100	340°	3	cloudy	moderate	16.70	33.762
117.80-B	25	1235	27°07.0'	118°12.0'	2000	320°	3	drizzle	moderate	17.15	33.990

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
117.90-B	IV-25	0745	26°47.5'	118°50.0'	2100	320°	3	cloudy	moderate	17.12	33.823
118.39-B	26	1145	28°18.5'	115°23.5'	135	270°	3	missing	moderate	14.16	33.628
120.22-B	27	0115	28°28.0'	114°04.0'	9	320°	4	partly cloudy	moderate	15.84	33.929
120.23-B	27	0150	28°27.0'	114°07.0'	13	320°	4	partly cloudy	moderate	15.24	33.889
120.24-B	27	0240	28°25.0'	114°10.5'	21	320°	4	partly cloudy	moderate	15.18	34.031
120.25-B	27	0320	28°22.5'	114°15.0'	30	320°	4	partly cloudy	moderate	15.43	33.936
120.30-B	27	0547	28°13.0'	114°34.0'	52	320°	6	missing	high	15.70	33.938
120.35-B	V-2	2215	28°03.0'	114°54.0'	45	calm		partly cloudy	moderate	15.74	33.930
120.40-B	2	1955	27°56.5'	115°14.0'	22	300°	4	partly cloudy	rough	13.60	33.944
120.55-G	12	0930	27°20.0'	116°13.0'	1950	330°	5	partly cloudy	rough	16.56	33.879
120.65-G	13	1915	27°00.5'	116°48.5'	2050	360°	4	cloudy	rough	16.40	33.772
123.36-B	IV-27	1435	27°26.5'	114°37.0'	28	320°	5	partly cloudy	very rough	13.45	33.919
123.37-B	27	1350	27°24.0'	114°40.0'	38	320°	5	partly cloudy	very rough	14.05	33.816
123.42-B	27	1940	27°14.0'	114°59.0'	820	320°	6	partly cloudy	high	16.04	33.920
123.45-B	27	2125	27°08.0'	115°10.5'	2000	320°	7	partly cloudy	high	15.96	33.859
123.50-B	28	0015	26°57.5'	115°33.0'	2000	330°	6	partly cloudy	high	16.32	33.814
123.55-B	28	0307	26°48.5'	115°49.5'	2000	330°	6	partly cloudy	high	17.11	33.936
123.60-B	28	0545	26°38.5'	116°09.0'	2100	320°	6	partly cloudy	high	17.13	33.909
123.65-B	28	0827	26°28.5'	116°28.0'	2000	320°	5	partly cloudy	high	17.08	33.925

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
123.70-B	IV-28	1050	26°19.0'	116°47.0'	2000	320°	5	partly cloudy	high	17.11	33.943
123.80-B	28	1505	25°59.0'	117°25.5'	2100	330°	5	cloudy	rough	17.30	33.866
124.36-B	27	1607	27°24.0'	114°32.0'	10	320°	5	partly cloudy	very rough	13.04	33.907
127.33-B	29	2110	26°57.5'	114°02.0'	35	280°	5	partly cloudy	moderate	13.80	33.851
127.33-B	29	2150	26°58.5'	114°00.5'	8	260°	5	partly cloudy	moderate	13.12	33.948
127.34-B	29	2020	26°55.0'	114°06.5'	40	280°	4	partly cloudy	moderate	16.81	33.976
127.40-B	29	1740	26°43.5'	114°29.0'	1600	330°	3	partly cloudy	moderate	16.56	33.976
127.45-B	29	1510	26°33.0'	114°48.5'	1800	330°	5	partly cloudy	very rough	16.24	33.865
127.50-B	29	1218	26°23.0'	115°08.0'	2000	320°	5	missing	very rough	16.69	33.891
127.55-B	29	0910	26°13.5'	115°27.0'	2000	320°	5	missing	very rough	17.49	34.047
127.60-B	29	0625	26°03.5'	115°46.5'	2050	340°	5	missing	rough	17.60	34.067
127.65-B	29	0330	25°53.0'	116°06.0'	1950	340°	5	partly cloudy	rough	17.71	34.110
127.70-B	29	0050	25°44.0'	116°24.5'	2000	340°	4	cloudy	rough	17.61	34.069
127.80-B	28	1955	25°24.0'	117°02.5'	2050	340°	4	cloudy	rough	17.23	33.974
130.26-G	V-18	1155	26°37.0'	113°13.5'	15	030°	4	clear	moderate	14.84	33.921
130.26-G	18	1240	26°38.0'	113°12.0'	15	020°	4	clear	moderate	14.62	33.921
130.28-G	18	1035	26°33.0'	113°21.5'	29	030°	3	partly cloudy	rough	16.28	33.890
130.35-G	18	0625	26°18.5'	113°48.5'	283	310°	5	partly cloudy	rough	16.44	33.823
130.45-G	18	0105	25°58.0'	114°25.0'	1910	300°	5	cloudy	very rough	17.62	33.881

TEMPERATURE AND SALINITY AT 10 METERS (NET-TOW STATIONS)

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
130.55-G	V-17	1714	25°37.5'	115°03.0'	1960	350°	3	cloudy	rough	17.60	33.946
133.20-B	IV-30	0924	26°13.5'	112°26.0'	8	260°	5	missing	moderate	13.58	34.061
133.21-B	30	1035	26°12.5'	112°32.5'	28	calm		missing	moderate	14.10	33.999
133.23-B	30	1140	26°08.5'	112°40.0'	40	280°	4	missing	rough	13.92	34.043
133.25-B	30	1236	26°04.5'	112°48.0'	45	280°	3	cloudy	rough	15.18	33.952
133.30-B	30	1505	25°54.5'	113°07.5'	110	320°	5	cloudy	rough	16.18	33.977
133.35-B	30	1740	25°44.0'	113°26.5'	360	270°	4	partly cloudy	rough	16.24	33.969
133.40-B	30	2010	25°34.0'	113°46.0'	1500	290°	4	partly cloudy	rough	16.64	34.034
133.45-B	30	2250	25°25.0'	114°03.5'	1800	320°	5	partly cloudy	very rough	17.98	34.209
133.50-B	V-1	0118	25°14.5'	114°24.0'	2000	330°	5	cloudy	very rough	17.49	34.022
133.55-B	1	0340	25°04.5'	114°43.0'	2050	320°	5	partly cloudy	rough	18.24	34.127
133.60-B	1	0620	24°54.5'	115°02.0'	2150	330°	5	cloudy	rough	17.54	34.018
133.65-B	1	0905	24°44.5'	115°20.5'	2000	330°	5	cloudy	rough	18.54	34.184
133.70-B	1	1155	24°34.5'	115°39.0'	2000	330°	5	cloudy	very rough	18.55	34.245
133.80-B	1	1635	24°14.5'	116°17.0'	2000	330°	5	cloudy	very rough	18.58	34.184
137.20-G	19	0830	25°40.5'	112°07.5'	6	300°	2	missing	moderate	18.76	34.069
137.21-G	19	0930	25°38.0'	112°11.0'	12	300°	3	missing	moderate	18.56	34.046
137.35-G	19	1808	25°04.0'	113°04.5'	600	320°	4	partly cloudy	moderate	17.90	33.983
137.45-G	20	0100	24°49.0'	113°42.0'	1910	320°	5	partly cloudy	rough	18.03	33.972

Station	Date	Time GCT	Latitude North	Longitude West	Sounding (fm)	Wind Dir	Wind Force	Weather	Sea	10 Meters T	10 Meters S
137.55-G	V-20	0650	24°29.5'	114°20.0'	2100	310°	4	missing	moderate	17.76	33.926
140.29-G	22	0850	24°47.5'	112°20.0'	22	310°	2	clear	moderate	16.80	34.160
140.29-G	22	0938	24°48.0'	112°19.0'	10	300°	2	clear	moderate	16.29	34.155
140.35-G	22	0435	24°35.5'	112°43.0'	510	330°	4	clear	moderate	18.03	33.963
140.45-G	21	2105	24°14.5'	113°22.0'	1775	360°	4	partly cloudy	moderate	19.92	34.372

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